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DOUBLE TROUBLE

A review of the relationship between UK poverty and economic inequality

Council housing in Tower Hamlets, London, dwarfed by financial buildings at Canary Warf.
Photo: Abbie Trayler-Smith/Oxfam

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The key finding of this research is that a positive correlation between income inequality and relative income poverty in the UK over recent decades can be clearly established. This suggests that to reduce UK poverty, it is also important to address high levels of economic inequality. A review of the evidence on a selection of mechanisms linking inequality with poverty helps to explain why higher levels of inequality are associated with higher levels of poverty.

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FOREWORD

Oxfam’s core purpose is the ending of poverty and suffering. Yet, in recent years, we have grown increasingly alarmed by extreme and growing inequality around the world. Some have questioned why an anti-poverty organisation should concern itself with the gap between rich and poor. The reason for our twin focus is simple: extreme inequality is a barrier to reducing, and ultimately, ending poverty across the world.

Globally, this analysis has become increasingly mainstream thinking. Indeed, when world leaders agreed the Sustainable Development Goals (SDGs) in 2015 they included – for the very first time – a specific goal to reduce inequalities, alongside the goal of ending poverty in all its manifestations. They have set themselves a stretching 2030 target.

Significantly, the SDGs do not apply only to developing countries, they apply everywhere – including in developed countries like the UK. However, to date, the relationship between poverty and economic inequality in the UK context has been woefully neglected. It is this gap that this report, *Double Trouble* helps to fill, and with significant implications for anti-poverty efforts within the UK.

Published with Oxfam GB’s academic partners, CASE/LSE, *Double Trouble* has taken the long view by exploring the trends in relative income poverty in the UK over the last five decades. We have focused on the relative income poverty measure as it is one of the key indicators used widely by all. This research asked the urgent, and controversial, main question – do these relative income poverty trends have anything to do with the high levels of UK income inequality that we have also witnessed?

The stark answer emerging from this comprehensive independent review of the empirical data is a resounding ‘yes’. This report makes clear there is a positive correlation between income inequality and relative income poverty in the UK. The strength of this connection depends on which measure of inequality is used and this report makes no claim about causation – but the central conclusion is clear.

The significance of this finding is that we can no longer treat poverty and economic inequality as separate problems which can be tackled in isolation. They are instead closely linked and must be tackled together.

We acknowledge that our report is only a humble first step - a problem diagnosis of the reality of the entwinement of income poverty and income inequality in the UK. We identify the broad range of policy directions which could address this, but more research is required to identify the suite of policy solutions.

However, we hope and believe that ‘*Double Trouble*’ makes a strong intellectual contribution to the academic and policy debate on the state of UK poverty by partially filling some of the existing knowledge gaps. We are also sober in the knowledge that, to have genuine impact, this research must do more than merely plug an intellectual gap; it must drive towards substantive policy and practice change.

Our key finding of a positive correlation between income poverty and economic inequality, must serve as an overdue and urgent call to action for all anti-poverty actors in the UK to seriously question whether a focus on reducing poverty alone is now sufficient to tackle the complexity of the challenge we face today. This could prove an uncomfortable challenge.

The shift Oxfam GB has made in widening its focus to encompass both poverty and inequality reduction has not been without its critics internationally or here in the UK. Yet the empirical data outlined in this report demands this reassessment. ‘Business as usual’ interventions to address domestic poverty in isolation from broader economic inequalities are no longer sufficient for Oxfam, or anyone else.

At the very least, the UK data contained in *Double Trouble* means the positive relationship between these two insidious realities can no longer be dismissed as either ungrounded ideological conjecture or even, as the report makes clear, as little more than the product of an inherent mathematical relationship.

For our part, *Double Trouble* will serve to reinforce and re-invigorate our global analysis that more unequal countries have less success in tackling poverty. We will therefore continue, unflinchingly, to sound the emergency alarm about the problematic relationship between poverty and inequality, this 'double trouble', wherever we find it occurring.

We ask all those with an interest in poverty reduction, from the governments of the UK to the anti-poverty sector itself, to explore with us the implications of this positive correlation. We know we don't have all the answers. Nor can we turn these insights into action on our own. It will take all of us to recognize the deep connections between poverty and economic inequality in the UK, and to act together to tackle these twin challenges.

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EXECUTIVE SUMMARY

A positive correlation

The research report, '*Double Trouble*', investigates the relationship between economic inequality and poverty in the UK and examines the trends in relative income poverty rates and income inequality over the period 1961 to 2015/16 (the latest year income data are currently available). Oxfam GB commissioned this research because the relationship between UK poverty and inequality is complex and not well understood; not least because historically these phenomena have tended to be researched separately.

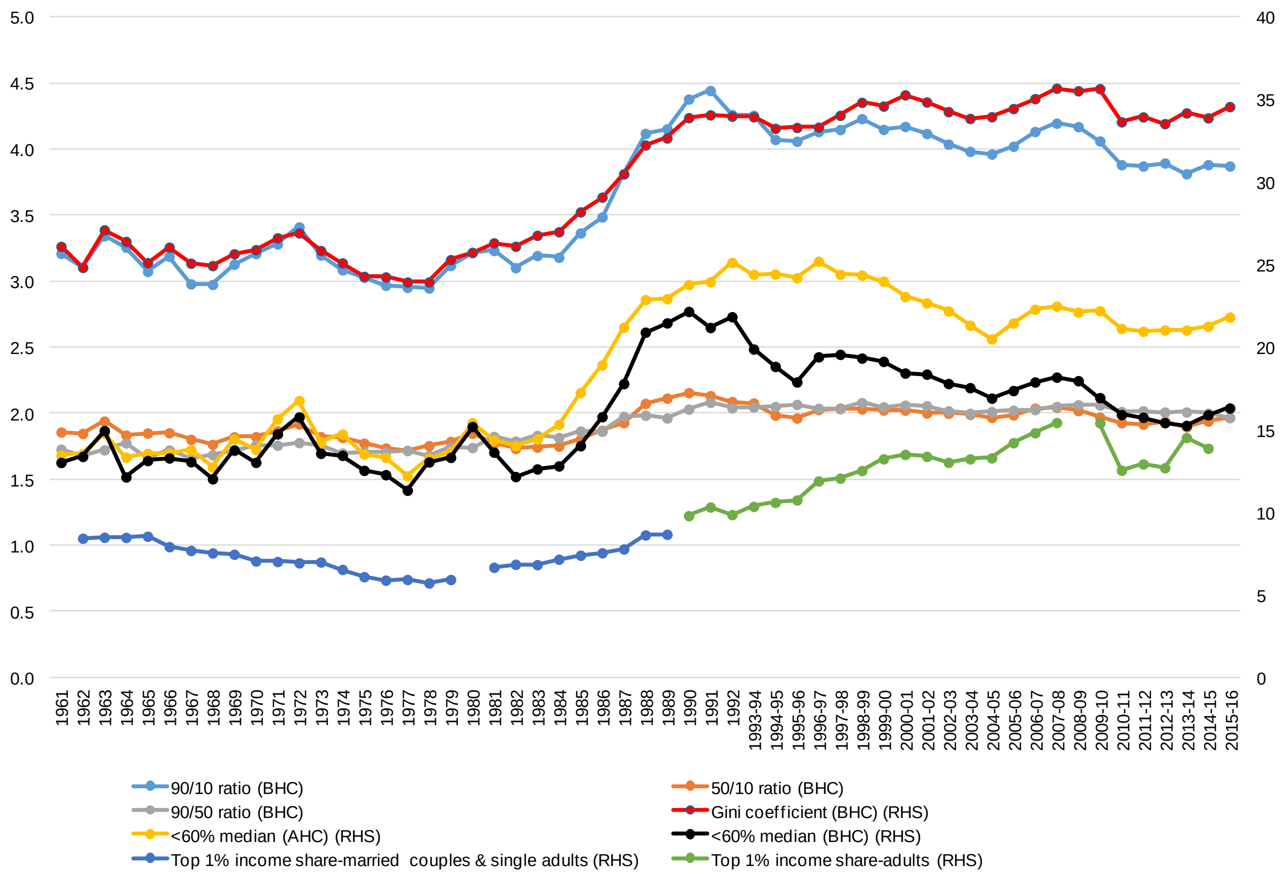
The key finding of this research is that a positive correlation between income inequality and relative income poverty in the UK over recent decades can be clearly established. We found that relative poverty rates tend to be higher when income inequality is higher, and this suggests that increases in income inequality are associated with increases in relative income poverty rates. Focusing on the Gini coefficient as a measure of income inequality, we show that, on average over the period 1961–2015/16 for the before-housing costs measure of income; this equates to an increase in the Gini coefficient of 1 point being associated with an increase in the rate of relative income poverty by 0.6 percentage points. For the after-housing costs measure, an increase in the Gini coefficient of 1 point is associated with an increase in the rate of relative income poverty by 0.7 percentage points.

Some of the relationship we observe between these two related but distinct phenomena is likely to be due simply to the mechanical (mathematical) relationship between commonly used measures of inequality and poverty. This is particularly the case between measures of relative income poverty and income inequality in the lower half of the income distribution, as both effectively summarise certain aspects of the distribution of income. More revealing is the observed relationship between inequality in the top half of the income distribution and income poverty. We find a positive correlation for inequality estimates which measure the ratio of high incomes to average (median) income and for the concentration of income among those on the highest incomes (for example, the top 1% share).

Historical trends

The history of this relationship shows that both income inequality and relative income poverty have followed similar time trends (see figure below). The series in the chart show trends in UK income inequality and relative income poverty from the early 1960s until 2015/16. In terms of the broad picture, the main increase in income inequality and relative income poverty occurred over the 1980s. There was some success in reducing income poverty rates in the 1990s, but high housing costs for low-income households limited the impact of these changes. For a number of years following the financial crisis poverty rates declined, but this was due to falling average incomes reducing the poverty threshold, and therefore the share beneath the threshold, rather than due to an improvement in living standards among low-income households (Belfield *et al.*, 2014). The overall dispersion of income measured by the Gini coefficient has remained fairly stable since the mid-1990s, but inequality measured by the concentration of income among the top 1% has continued to increase, with recent trends in this series since the financial crisis being linked to behavioural responses of the most well-off to changes in taxation.

Figure: UK income inequality and poverty trends 1961–2015/16



Sources: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2016. Top income shares from the World Wealth and Income Database (WWID). The authors would like to thank Facundo Alvaredo (at WWID) for providing an updated series for UK top income shares.

The geography of inequality and poverty

Inequalities between England, Scotland, Wales and Northern Ireland have also increased over time, and the cost of housing plays an important role here. There is also evidence of increasing geographical segregation of 'the rich' and 'the poor' which has important implications, not least for people's perceptions of inequality, which can in turn alter preferences for redistribution or other policy action designed to tackle poverty and inequality.

Identifying drivers of the correlation

Various mechanisms appear to drive the relationship between inequality and poverty, and in this review we begin the process of exploring the existing evidence. It is beyond the scope of this project to review the evidence on all potential mechanisms and therefore we focus on a selection. Across all areas covered in the review we found evidence that helped to explain why a positive relationship between economic inequality and poverty exists. For example, reviewing the evidence on the role of public opinion, voting behaviour and broader features of the political economy we find:

- While most Britons believe that inequality is too high (McKnight and Tsang, 2013), there is a tendency for people to underestimate the true level of inequality and overestimate social mobility (Osberg and Smeeding, 2006; Orton and Rowlingson, 2007); this is linked to sub-optimal pressure on governments to reduce inequality to a more acceptable level (Georgiadias and Manning, 2012).

- Increasing inequality has been related to a change in the composition of the voting electorate, who are now better off on average than the population as a whole. This has skewed government policy in favour of better-off households, and made them less likely to tackle poverty (McKnight and Tsang, 2014).
- Evidence suggests that a growing rich and powerful elite with access to political power and decision making are influencing legal frameworks and government policy in their favour. This leads to a greater concentration of income and wealth, fewer resources to be shared among the rest of the population and less concern for low-income households (e.g. Stiglitz, Piketty, Atkinson, etc.).

Future policy directions

There is a growing body of evidence that high and rising economic inequality is harmful for growth (e.g. Cingano, 2014 and Ostry et al., 2014), and that tackling poverty alone is not enough to reduce economic disparities and poverty in the long run. Although tackling inequality through redistribution may not be the only solution, recent evidence has shown that redistribution is not damaging for economic growth and that poverty reduction efforts are more effective in environments of lower inequality (Ostry et al., 2014).

The Equality Act 2010 and the broader equality agenda are important elements in reducing inequality, but it is clearly possible to reduce inequalities between population groups (e.g. equalising poverty rates or pay between genders or ethnic groups) without reducing *overall* inequality and poverty. This suggests that an equality agenda needs to be combined with both an anti-poverty strategy and a focus on reducing overall economic inequality, to produce positive long-term change.

Projections of inequality and poverty trends in the UK suggest that inequality and poverty will increase further in the next five to fifteen years (Hood and Waters, 2017). However, experts are optimistic about the role that policy can play, both to curb increasing rates of inequality and poverty and to bring those rates down.

The finding of this research supports the view that there exists a series of mechanisms linking inequality with poverty more broadly. We therefore conclude that for organisations and governments concerned with reducing poverty, it is also important that they focus on addressing high levels of economic inequality if they are to be successful. This is the urgent policy challenge that Oxfam would like to see the UK government respond to, so that it matches the apparently greater appetite for tackling inequality and poverty that we have seen in the devolved administrations of the UK since 2010. We recommend that the recently agreed UN Sustainable Development Goals offer a real vehicle for action for the UK government to create a fairer society, with the gains from any future growth being shared more equally.

EXTENDED SUMMARY

It is well documented that economic inequality in the UK is high relative to many comparable advanced economies and that inequality and relative income poverty increased most dramatically over the 1980s. The objective of this research is to review evidence of the relationship between economic inequality and poverty in the UK and to provide a clear understanding of whether it is important to reduce inequality even when the ultimate objective is to tackle poverty. To do this we examine different measures of inequality to explore why different inequality measures may be more or less correlated with measures of poverty in a purely mechanical (mathematical) sense. We examine trends in inequality and poverty across the UK, within and between regions of the UK, and between different population sub-groups. We provide evidence on the empirical relationship between income inequality and poverty in the UK since the 1960s. We then review the existing literature, examining a selection of factors that it has been suggested drive the relationship between inequality and poverty, and which need to be taken into account when designing a policy response to the challenges that lie ahead. This section provides a short summary of the key findings. All the findings reported relate to empirical analysis undertaken as part of this research project or are fully referenced to existing literature which can be found in the main body of the report.

This research makes an important contribution to our understanding of the relationship between economic inequality and poverty but simply scratches the surface of this vast topic. There remains more work to be done on the empirical estimation of the relationship – we only had the time and resources to focus our empirical estimation on relative income poverty and income inequality, and there remains important work to be done on the role of gender, the labour market and understanding the role of other mechanisms. Further research is currently underway in the Centre for Analysis of Social Exclusion with findings due to be published towards the end of 2017 and during 2018.[1]

INTRODUCTION

Over the last three to four decades, economic inequality has been on the rise within many high- and middle-income countries, though the timing and the extent of any increase has varied significantly between countries. In the decades leading up to the economic crisis of 2007/08, some countries did not experience rising economic inequality, and some even experienced periods when inequality fell. However, the general trend has been upwards, and with this increase has emerged a growing concern about the harmful effects of inequality on societies. A consensus is emerging that more needs to be done to halt this trend, to ensure that the proceeds from future growth are shared more equally, and that solutions are found to limit the harmful impact of inequality.

There has been a notable shift as a number of major international organisations which previously focused on tackling poverty have widened their remit to include economic inequality. Twin goals set by the World Bank and the United Nations (UN) to reduce poverty and inequality extend beyond the poorest nations to include rich and middle-income countries. This shift can be traced to concerns about the role that rising economic inequality played in the lead up to the 2007/08 financial crisis and what is seen as an opportunity to ensure that the benefits from future growth will be shared more equally.

As a UN member, the UK is committed to working to achieve the UN Sustainable Development Goals, which include inequality and poverty reduction. However, two years on, exactly how this will be achieved is still not clear. The UK government has not set any domestic goals to explicitly reduce economic inequality, and recently dropped child poverty reduction targets measured in terms of income poverty. The devolved administrations in Scotland and Wales have more defined anti-poverty strategies and the Scottish government has set an explicit target to reduce income inequality.

INEQUALITY AND POVERTY MEASURES

We explore a number of different inequality measures which are widely used in the literature. We do this because different measures vary in terms of their sensitivity to changes in income in different parts of the income distribution. To understand the relationship between economic inequality and poverty, it is important to understand differences between commonly used measures. For purely mechanical (mathematical) reasons, inequality measures sensitive to changes in the lower part of the income distribution are more likely to display greater correlation with income poverty measures.

Our examination of economic inequality extends beyond income; in particular, to earnings and wealth. For most households, earnings from employment are the main source of income, but the relationship between earnings inequality and income inequality is not straightforward. This is due to the distribution of work across households, differences in household size and composition, and the distribution of high- and low-paid workers. Wealth is accumulated over periods when income exceeds expenditure and through lifetime gifts and inheritance. Wealth inequality is considerably higher than income inequality, with large concentrations of wealth among the wealthiest households and some highly indebted households at the bottom of the distribution. As wealth accumulation has a strong lifecycle dimension, the relationship between household income and wealth at a point in time varies strongly by age. Social mobility is a measure of how inequality in one generation is transmitted to the next and itself is an important dimension of inequality.

Material deprivation now features in official measures of poverty alongside income-based measures. Other measures of poverty include in-work poverty and area-based measures such as the index of material deprivation. To explore the different dimensions of poverty picked up by these measures, we cover a range of measures in this review.

INEQUALITY AND POVERTY TRENDS

We document trends in poverty and economic inequality in and within the UK. We show how rising housing costs among low-income households have led to a widening gap between before- and after-housing costs measures of income poverty and income inequality.

Although the main increase in income inequality occurred over the 1980s in the UK, concentration of incomes among a small minority of individuals continued to increase up to the financial crisis in 2007, and changes since the crisis appear to reflect behavioural responses of higher income individuals to changes in taxation. Individual earnings inequality also grew dramatically over the 1980s and has increased modestly since then, but the distribution of paid work across households has changed considerably. Although the risk of poverty is greater in workless households, it is now the case that more than half of all households in poverty have at least one adult in work. Although there are strong links between labour market inequality and income inequality, other sources of income (e.g. income from capital) also play an important role in determining inequality and the risk of poverty. In addition, the state plays a very important role in reducing inequality in market income through direct taxes and cash transfers.

EMPIRICAL RELATIONSHIP BETWEEN INCOME INEQUALITY AND POVERTY

A clear positive empirical relationship is observed between income inequality and relative income poverty. Focusing on the Gini coefficient as a measure of income inequality, we show that, on average over the period 1961–2015/16 for the before-housing costs measure of income, an increase in the Gini coefficient of 1 point is associated with an increase in the rate of relative income poverty by 0.6 percentage points. For the after-housing costs measure, an increase in the Gini coefficient of 1 point is associated with an increase in the rate of relative income poverty by 0.7 percentage points. We examine the relationship between poverty and inequality in the top and bottom halves of the income distribution. These measure the difference between some of the lowest incomes (lowest 10%) and average household income (median) and between some of the highest incomes (highest 10%) and average income (median). As we would expect given the mathematical relationship between measures of poverty and inequality, we find that poverty has a stronger correlation with inequality in the bottom half of the distribution than in the top half of the distribution. However, when income is measured after housing costs have been taken into account, we find a stronger correlation between relative income poverty and inequality in the top half of the income distribution than in the bottom half of the distribution. We even find a positive correlation between inequality at the very top of the income distribution, measured by the share of income received by the top 1%, and relative income poverty. This is driven by two main clusters – years where poverty rates and income concentration were relatively low and years where poverty rates and income concentration were relatively high. However, there were several years when poverty rates fell while income concentration continued to rise. This is perhaps not surprising given policy efforts to reduce poverty, but no policy focus on reducing income concentration. Overall, these findings suggest the presence of mechanisms driving the relationship between these two phenomena.

FACTORS DRIVING THE RELATIONSHIP BETWEEN INEQUALITY AND POVERTY

The vast majority of Britons consider that income inequality is too high. Although a smaller share believe that government should redistribute income from the well-off to the less well-off this does not imply that the majority would not be in favour of efforts by government to reduce inequality through other policies. The evidence also shows that people underestimate the level of inequality and overestimate the level of social mobility. This is important because there is a positive (negative) correlation between people’s perceived level of inequality (social mobility) and the demand for redistribution.

Standard political economy models predict that an increase in inequality will lead to an increase in demand for redistribution by the electorate and as a result inequality will fall, but the empirical evidence is mixed. A recent study for the UK found that the demand for redistribution did not increase as inequality increased and consequently pressure was not put on the government to redistribute more. Inequality has remained high in the UK, and a number of factors seem to have played a contributory role: an underestimate of the real level of inequality by the electorate; New Labour’s ‘somewhat ambiguous’ position regarding inequality and a focus on equality of opportunity not outcome; growing average incomes and employment; a change in preferences and beliefs leading to a fall in the demand for redistribution (in particular, attitudes about the disincentives to work associated with welfare state cash support). A clear policy pointer is that any organisation seeking to tackle poverty should focus on informing the UK electorate of the true level of inequality in the UK so that they can reach an informed decision on whether the government should do more to redistribute income or pursue policies that result in a more equal distribution of economic resources and living standards.

Research examining the geography of income, poverty and wealth has consistently shown an unequal distribution across the UK and recent research has documented an increasing geographical concentration of poverty and wealth. This segregation can be important, as it can alter people's perceptions and affect their preferences for redistribution or other policy action designed to tackle poverty and inequality. We document the regional inequalities in individual average annual earnings and show how these inequalities have widened since the end of the 1990s. This is driven by greater increases in average annual earnings in England and Scotland than in Wales and Northern Ireland. Within England, average annual earnings have grown much more in London than in other English regions, leading to an increase in geographical inequality. Income poverty rates (before-housing costs) are higher in Wales and Northern Ireland than in England or Scotland and this gap has widened since the financial crisis. However, lower housing costs in Scotland for low-income households has meant that relative income poverty rates after-housing costs are lower in Scotland than in England and Wales. Within English regions there is evidence of some convergence in before-housing costs measures of relative income poverty, but higher housing costs in London have meant that a large gap in relative income poverty rates has emerged between London and other English regions. This means that despite higher average earnings observed in London, relative income poverty rates after-housing costs remain higher than in other English regions or, on average, within Scotland, Wales and Northern Ireland.

Analysis of the geography of public expenditure shows considerable regional disparities, in terms of both expenditure on services and on infrastructure. Public expenditure on services appears to benefit residents in Northern Ireland and Scotland relative to people living in England and Wales. There also exist considerable differences in expenditure per head between English regions, with much lower rates in the South East and the East of England relative to London, the North East and the North West. In addition, public infrastructure expenditure per resident has been found to be considerably higher in London and the North West than in the North East and the West Midlands. Higher expenditure in London has been suggested by some researchers as a factor behind the much higher growth rates in London relative to other English regions since 2009.

Greater freedoms to raise revenue and over local spending decisions realised by greater devolution may help to reduce poverty, but there is a danger that spatial inequalities increase as lower taxes are used to attract higher income households to an area, and areas with the highest rates of deprivation are the least able to raise much-needed revenue.

We examined the evidence on austerity, the relationship between wealth and access to political power and decision making, political representation, legal frameworks and voting. We found striking evidence of the harmful effects of inequality in societies, particularly where it is associated with inequalities in power, putting individuals on a low income at an even greater disadvantage.

While some politicians and economists see austerity as necessary to revitalise the economy following the financial crisis and the economic downturn, others are more sceptical about the motives and the scale of public expenditure cuts. Evidence of a strong negative relationship between austerity and growth is used to support the theory that, rather than austerity revitalising economies, it hinders their recovery. Ultimately, they argue, economies need to grow their way out of the current debt crisis, as the scale of debts simply cannot be repaid through cutting expenditure.

One theory to explain why inequality has increased, in the form of concentration of income and wealth at the top, is that it is the result of the actions of a wealthy elite with access to powerful political networks. We use examples of campaign contributions and policy responsiveness as a function of constituent income, and access to elite occupations or political posts as a means to explain how the rules of the political game have been tilted.

Political economy models have shown how the middle class tends to determine the outcome of political elections, as they have reason to form affinities with both low-income individuals and the wealthy. The electoral system appears to play an important role in determining which affinity dominates, with empirical evidence supporting the theory that centre-right governments tend to dominate in majoritarian systems while centre-left governments tend to dominate in proportional representation systems, which in turn tend to redistribute more than centre-right governments.

There is a growing recognition of the role of tax havens in perpetuating inequality and reducing the potential for governments to tackle inequality, due to their impact on government revenues. As a result of the role that policy and legal rules play in allowing the development of these havens, some legal scholars have argued that legal frameworks have played a key role in shaping inequality trends, particularly in relation to returns to private capital which benefit the already well-off. They see the solution to reducing inequality very much as a legal one, but while wealthy individuals use their money and influence to tilt legal and financial policy decisions in their favour, legal reform is limited.

One area where there is scope to find a legal solution is the regulation of excess remuneration among financial sector workers, CEOs and top executives. The European Union recently introduced regulations to curb bankers' bonuses (creating a stronger link between pay and longer term productivity) and excessive pay for CEOs and top executives; but legal challenges are limiting the effectiveness of this legislation, highlighting the difficulty of changing rules that potentially disadvantage wealthy and powerful people.

Unequal turnout in general elections – where lower income individuals are less likely to exercise their right to vote – results in pivotal voters having higher than average incomes. There is some evidence that this leads to the voting electorate being less likely to vote in favour of redistribution than the population at large. This tendency may contribute to a trend towards entrenched levels of inequality and poverty as disenfranchised members of the electorate become attracted to populist parties and candidates.

CONCLUSIONS

Relatively high levels of economic inequality prevail in the UK, with the main increases occurring over the 1980s, although some aspects of inequality have continued to trend upwards. It has been shown that policy has an important role to play. Inequality levels did not increase as many expected over the recent economic downturn which can, in part, be explained by the initial protection of cash benefit values in the first year or two of the economic downturn; the protection of pensioner income through the 'triple-lock' State Pension policy; and strong employment figures. One feature of recent economic inequality trends is the increase in the concentration of income among a small proportion of individuals at the top of the distribution. International evidence shows that this is a feature of Anglo-Saxon countries, and is associated with the size of the financial services sector and the rise of what Thomas Piketty calls 'super-managers' and 'super-salaries'.

Although relative measures of wealth inequality show falls in the decade that preceded the economic downturn, driven by a house price boom and increases in home ownership benefiting households with modest levels of wealth, in recent years wealth inequality has increased. This seems to be driven by an accumulation of wealth at the top of the distribution and younger households being priced out of the housing market due to a combination of falling real incomes, house price inflation and limited access to credit. The concentration of private wealth among a small elite has continued to increase and the latest figures for 2016 suggest that the wealthiest 1% own nearly 24% of private wealth in the UK. A generational divide has opened, which may diminish once the economy recovers or be moderated by the transfer of assets between generations, either in the form of inter vivo transfers or inheritance.

Income poverty rates had declined somewhat from the peak levels observed in the early 1990s and fell further over the economic downturn. This was due to falling real incomes, falling median incomes reducing the poverty line, the 'triple-lock' improving pensioners' relative incomes and cash transfers protecting, to some extent, the incomes of households at the bottom of the distribution in the initial years following the financial crisis. The latest evidence shows an increase in relative income poverty since 2013/14 and only time will tell if this is part of a longer run trend. The long-term decline in absolute poverty rates had already faltered before the financial crisis, which may, in part, be linked to falling wages and in some years since the financial crisis absolute income poverty rates increased. Another change that has been exacerbated by recent trends has been the widening gap between income poverty rates (relative and absolute measures) before- and after-housing costs have been taken into account. The rise in the relative costs of housing for low-income families has meant that poverty rates measured after-housing costs are considerably higher than rates measured before-housing costs. We also observe a similar divergence in income inequality between these two measures of income.

Although individual-level wage and earnings inequalities have only increased modestly in the last decade relative to large increases observed in the 1980s, the share of working age individuals living in low-income households where at least one adult is in work has increased. In the last few years more than half of all working age adults living in a low-income household are living in working households. That does not mean that the risk of poverty is higher in working households as workless households are still at a considerably higher risk of being poor, but it does reflect the fact that income from employment is not sufficient to lift household income above the poverty line for many. This is due to a combination of low pay, low working hours, household composition, changes to the cash transfer system and rising housing costs.

The key finding from the statistical analysis of the relationship between income inequality and relative income poverty undertaken in this research is a positive relationship between the two: poverty rates tend to be higher when income inequality is higher.

We reviewed the existing literature to understand what factors may be behind the observed positive correlation between economic inequality and poverty. To keep the review to a manageable scale, we focus on a number of specific areas.

Evidence shows that the vast majority of Britons consider that income inequality is too high and many believe that the government should do more in terms of redistributing income from the well-off to the less well-off. However, evidence also shows that people underestimate the true level of inequality and overestimate rates of social mobility. This may be linked to spatial segregation, and suggests that simple measures to ensure that the UK electorate is better informed of the true level of economic inequality may lead to greater pressure on government to explicitly tackle inequality and bring it down to more acceptable levels.

Economic inequality appears to have quite profound effects within the overall political economy. Greater concentrations of income and wealth have been linked to the emergence of powerful elites who put pressure on governments to shape policies in their favour (e.g. limiting curbs on executive pay, reducing tax liabilities, cuts to the welfare state, a particular form of austerity). One symptom of this is a steepening social gradient in voter turnout and mainstream political parties focusing on wooing ‘the median voter’, who now has above-median levels of income. There is a growing body of evidence that high and rising economic inequality is harmful for growth, and tackling poverty alone is not sufficient to reduce economic disparities. Tackling inequality through redistribution is not the only solution, and although recent evidence suggests that redistribution is not damaging for economic growth, tackling inequality through pre-distributive policies (such as: education, early-years interventions, training) may enjoy stronger public support. Experts are nonetheless optimistic about the role that policy can play both to curb increasing rates of inequality and poverty and to bring rates down. The Equality Act 2010 and the broader equality agenda are important elements in reducing inequality, but it is clearly possible to reduce inequalities between population groups (e.g. equalising poverty rates or pay between genders or ethnic groups) without reducing *overall* inequality and poverty. This suggests that an equality agenda needs to be combined with both an anti-poverty strategy and a focus on reducing overall economic inequality, if it is to produce positive, meaningful long term change.

There seems to be a greater appetite for tackling inequality and poverty in the UK devolved administrations than we have seen from the UK government since 2010. However, with pressure being put on domestic governments as a result of the recently agreed UN Sustainable Development Goals there is now a real prospect for action. Of the 17 Sustainable Development Goals, one is specifically focused on reducing income inequality (which includes a target to increase the real incomes of the lowest 40% relative to the national average by 2030) and another is to reduce poverty in all forms everywhere. These goals are defined in terms of reducing income inequality and poverty both between but also within all countries (rich and poor). This seems to us a real opportunity to create a fairer society, in which the gains from future growth are shared more equally.

1 BACKGROUND

Economic inequality has been on the rise in many rich and middle-income countries over the last three to four decades, but the timing and the extent of any increase has varied significantly between countries (Salverda *et al.*, 2014; OECD, 2008). Although the general trend in economic inequality has been upwards in the decades leading up to the recent economic crisis, some countries did not experience rising economic inequality and some countries even experienced periods when inequality fell (Nolan *et al.*, 2014); This general upward trend has led to a growing concern about the harmful effects of inequality on societies. A consensus is emerging that more needs to be done to halt this trend, to ensure that the proceeds from future growth are shared more equally and that solutions are found to limit any harmful impact of inequality (see, for example, World Bank, 2016).

In 2014, Oxfam launched a campaign which seeks to challenge rising global economic inequality as a barrier to ending poverty, and proposes both global and national solutions (Even It Up, Seery *et al.* (2014)). Increasingly, Oxfam's programme identity is being extended to encompass inequality in addition to poverty. In the UK, Oxfam has predominantly sought to frame the Even It Up campaign in global terms, but with very broad solutions that apply in the UK context – fair tax, decent work, investment in quality public services. To date, Oxfam has not explicitly set out the challenge of, or concrete solutions to UK inequality, other than through media briefings and comment. In Scotland, Oxfam used the inequality frame within the 'Our Economy' paper of 2013 (Trebek *et al.* 2013), in the lead up to the 2014 Scottish Independence referendum, and it also underpinned the paper published in October 2015 outlining Oxfam's policy priorities for the Scottish Parliament (Oxfam, 2015).

In 2017 Oxfam GB wishes to develop a robust conceptualisation of inequality in the UK, including causes, impacts and some routes to reducing it – in order to develop an informed policy position. This evidence review is designed to provide the information required to draw a clear line between efforts to reduce economic inequality and reductions in poverty, and to help identify policies that could achieve this.

Following the introduction (Section 2), we begin by outlining the different measures of economic inequality and poverty (Section 3). In Section 4 we map trends in economic inequality and poverty in the UK. In Section 5 we examine the evidence on inequality and poverty between and within population sub-groups, focusing on characteristics protected by the Equality Act 2010. In Section 6 we provide evidence on the empirical relationship between inequality and poverty in the UK. In Section 7 we review the evidence on a range of different factors that are thought to shape the relationship between economic inequality and poverty and therefore might hinder efforts to reduce poverty when inequality is high. Finally, in Section 8 we summarise the main findings.

2 INTRODUCTION

The link between inequality and poverty has been highlighted by a number of international organisations which have outlined a series of policy recommendations supporting the view that high levels of inequality need to be tackled even if the central objective is to reduce poverty. In this brief introduction, we review the developing policy context set by international organisations, the UK government and UK devolved administrations.

Key points

- There has been a notable shift within a number of major international organisations which previously focused on tackling poverty to a wider remit that includes addressing economic inequality.
- A number of publications by leading experts have highlighted the positive role policy can play in poverty and inequality reduction.
- Twin goals to reduce poverty and inequality set by the World Bank and the United Nations extend beyond the poorest nations to include rich and middle-income countries.
- As a UN member, the UK is committed to working to achieve the UN Sustainable Development Goals.
- The UK government has not set any domestic goals to explicitly reduce inequality and recently dropped child poverty reduction targets measured in terms of income poverty.
- The devolved administrations in Scotland and Wales have more defined anti-poverty strategies and the Scottish government has set a target to reduce income inequality.

Economic inequality was high on the agenda at recent meetings of the World Economic Forum (WEF); from 2012, inequality has been identified by WEF members as the most likely threat to the global economy. A paper published by the WEF in advance of the 2015 meeting in Davos (*Benchmarking Inclusive Growth and Development;* WEF, 2015a) and then published as a full report in September 2015 emphasised the need to come up with concrete plans to tackle inequality and not simply lament the widening gap between rich and poor (WEF, 2015b). The report and paper identify six main policy areas and fourteen sub-divisions where governments need to focus attention to ensure that the benefits from economic growth are shared more equally. The World Bank also recently set twin goals to reduce extreme poverty alongside boosting 'shared prosperity' (growth in the income of the bottom 40% in *every* country) (World Bank, 2014); with the intention to focus the work of the World Bank on 'increas[ing] the incomes and welfare of the less well-off wherever they are, be it the poorest of nations or in thriving, middle-income countries'.

In 2015, members of the United Nations agreed to adopt the post-2015 development agenda which included 17 Sustainable Development Goals covering both poverty and inequality reduction targets. Goal 1 is 'To end poverty in all its forms everywhere' and Goal 10 is to 'Reduce inequality within and among countries'. Three of the targets are highly relevant:

- By 2030, progressively to achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average;
- By 2030, to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status;
- To ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.

This backdrop highlights the importance of Oxfam's aim to review the existing evidence on the relationship between inequality and poverty in the UK, in order to inform the development of policy.

A number of highly regarded scholars have recently published their analyses of inequality trends and suggestions for how governments could take steps to reduce inequality. Anthony Atkinson (*Inequality: What Can be Done?*, 2015) reviewed the evidence on the economic causes of inequality in rich countries, drawing in part on his own extensive research output. He made a number of proposals for what can be done to ensure that future growth in income is shared more evenly. Thomas Piketty's book *Capital in the Twenty-First Century* (2014) focuses on the concentration of income and wealth among a small elite. He examines factors that explain cross-country differences and trends over time. Piketty explores a number of potential policy solutions to reduce income concentration from a global perspective. Joseph Stiglitz, in his book *The Price of Inequality* (2012), considers the role of power in modern market-based democracies in shaping economic inequalities. He outlines how concentrations of power through the accumulation of income and wealth have distorted the functioning of markets. Stiglitz also considers the role of governments and political institutions and how they have frequently exacerbated the dominance of the wealthy in terms of shaping policies that favour the already well-off. He too puts forward a concrete set of proposals to tackle inequality.

In a recent briefing (*An Economy For the 1%*, Hardoon et al., 2016), Oxfam outlines how power and privilege is used to skew the economic system to increase the gap between the richest and the rest; outlining why concentrations of income and wealth are not simply an issue of inequality but a barrier to reducing poverty and hardship.

Further evidence on economic inequality is contained in *The Oxford Handbook of Economic Inequality* (edited by Salverda, Nolan and Smeeding; 2009) and the output from the EU FP7 funded Growing Inequalities' Impacts (GINI) project which was published by Oxford University Press in two volumes *Changing Inequalities and Societal Impacts in Rich Countries: Analytical and Comparative Perspectives* (Salverda, Nolan, Checchi, Marx, McKnight, Tóth, and van de Werfhorst (eds); 2014) and *Changing Inequalities and Societal Impacts in Rich Countries: Thirty Countries' Experiences* (Nolan, Salverda, Checchi, Marx, McKnight, Tóth, and van de Werfhorst (eds); 2014).

Highly influential publications by the OECD, *Growing Unequal: Income Distribution and Poverty in OECD Countries* (OECD, 2008), *Divided We Stand: Why Inequality Keeps Rising* (OECD, 2011) and *In It Together: Why Less Inequality Benefits All* (2015) have drawn attention to international trends in inequality, the harmful effects of inequality (including lower growth) and policy solutions to tackle inequality. Other recent research has also found evidence that high inequality is harmful to economic growth (Cingano, 2014 and Ostry *et al.*, 2014).

The European Commission recently published a note: *High and Rising Inequalities; What Can be Done About it (at EU level)?* (Maquet *et al.*, 2015). The LSE research team, led by McKnight, has recently completed an evidence review on inequality for the European Commission's DG Employment, Social Affairs and Inclusion, which specifically assesses the evidence on the effectiveness of a number of key policies for reducing inequality (McKnight, Duque and Rucci, 2016) and a second 'What Works' review on preventative measures and preventative approaches to low pay and in-work poverty (McKnight, Stewart, Himmelweit and Palillo, 2016). This review draws from and builds on all these resources.

There exists a very broad literature assessing the impact of economic inequality on societies. The work of Wilkinson and Pickett (*The Spirit Level*, 2009), in particular, has played an important role in highlighting the range of potentially harmful effects of high and rising inequality. They argue that income inequality is harmful to society by virtue of its relationship to many different undesirable outcomes. They claim that higher income inequality leads to more social problems, worse health, higher mortality rates, more social problems, higher crime rates, lower trust and lower political participation, leading to lower social cohesion. However, not everyone agrees with the work of Wilkinson and Pickett, highlighting deficiencies in their methodology (see for example, Saunders, 2010 and Snowdon, 2010). A large-scale, 30-year, 30-country study involving more than 200 researchers tested whether the cross-country bivariate relationships that Wilkinson and Pickett identified held if you looked within countries over time – for example, when inequality increases within a country, do outcomes deteriorate? The findings from this study suggest that, for many of the outcomes examined by Wilkinson and Pickett, the relationship did not hold (Salverda *et al.*, 2014). However, where information was available, it did suggest that, where income inequality increased, inequality in various outcomes increased too, even if the average did not fall. Lengthy time lags between any rise in inequality and a deterioration in the outcome being studied may have contributed to limited evidence of the relationship between changing inequality and its impact.

Another way that economic inequality can have an impact on economies such as the UK is in terms of its relationship with economic growth. In the 1950s and 1960s, Simon Kuznets hypothesised that, as an economy develops, market forces will first increase then decrease overall economic inequality. He famously illustrated this relationship through a diagram showing an inverted U-shape, in what has become known as the Kuznets curve (Kuznets, 1955). However, Kuznets' prediction that economic development will eventually benefit all members of a society through the trickle-down effect, an increase in per-capita income and development of a welfare state, has not materialised in many advanced economies. Criticism of Kuznets' analysis on which his hypothesis was based is similar to the criticism of Wilkinson and Pickett's work – a bivariate relationship observed across a selection of countries at a point in time does not necessarily predict what will happen within countries over time.

More recently, a series of studies have found a negative relationship between economic inequality and economic growth. A recent IMF staff paper explored this relationship in some detail and reached three main conclusions:

> *First, more unequal societies tend to redistribute more. It is thus important in understanding the growth–inequality relationship to distinguish between market and net inequality.*
>
> *Second, lower net inequality is robustly correlated with faster and more durable growth, for a given level of redistribution.*
>
> *And third, redistribution appears generally benign in terms of its impact on growth; only in extreme cases is there some evidence that it may have direct negative effects on growth. Thus the combined direct and indirect effects of redistribution – including the growth effects of the resulting lower inequality – are on average pro-growth.*
>
> (Ostry *et al.*, 2014, p. 4)

In 2014 the OECD published a short note summarising its body of work on inequality and growth (OECD, 2014). The conclusion of their research is that an increase in income inequality will lead to a fall in economic growth. One of the main reasons for this is that poorer members of a society are less able to invest in their education and this has a negative effect on productivity and social mobility. They find that tackling poverty is not enough and policy needs to work to increase the relative incomes of the lowest 40%. Like the IMF research, they too find that redistribution does not hinder growth. They recommend redistribution through a well-designed system of cash transfers and taxation, and increasing access to public services (high-quality education, training and healthcare).

The UK government doesn't have any explicit targets to reduce inequality. It does fund a Social Mobility Commission (an independent statutory body) which used to be called the Social Mobility and Child Poverty Commission until the Welfare Reform and Work Act received Royal Assent in March 2016; which retrospectively renamed the Child Poverty Act as the Life Chances Act 2010. The result is that child poverty targets and strategies set out in the Child Poverty Act 2010 have been removed, although perhaps in response to criticism[2] and opposition in the House of Lords, the government has agreed to continue to publish the four measures of child poverty set out in the 2010 Act on an annual basis.

The Scottish government has an explicit target to reduce income inequality in Scotland (by 2017):

> *Tackling income inequality is important for a range of reasons. It is important for the economy, because international evidence suggests that increased income inequality can be detrimental to a country's economic performance. It is important for society, because more equal societies tend to be more cohesive. It is important for individuals, who want to be treated fairly and be able to fulfil their potential.*
>
> http://www.gov.scot/About/Performance/scotPerforms/purposetargets/solidarity

Scotland's Economic Strategy sets out the ambition for Scotland to rank in the top performing quartile of OECD countries in terms of levels of inequality (Scottish Government, 2015). In terms of spatial inequalities, the Scottish government has a further target to narrow the gap in participation (employment rates) between Scotland's best and worst performing regions by 2017. They also have a Child Poverty Strategy and a Child Poverty Measurement Framework as a means to assess progress.[3]

The Welsh government also has a series of strategic plans which include measures to tackle inequality and poverty in Wales: Tackling Poverty Action Plan,[4] Child Poverty Strategy[5] and the Strategic Equality Plan. These include a series of targets and action plans. There is no explicit target to reduce income inequality in Wales.

In Northern Ireland there is an Equality Commission which is a non-departmental public body established by the Northern Ireland Act 1998, providing protection against discrimination. However, in 2015 The Stormont Executive was found to be in breach of its duties by failing to adopt an anti-poverty strategy for Northern Ireland, through its failure to adopt a strategy for dealing with poverty, social exclusion and patterns of deprivation based on objective need.[6]

Although there is clearly some variation across UK administrations in approaches to tackling inequality and poverty and the relative priorities accorded to different strategic goals, the UN Sustainable Development Goals look set to provide a structure that will focus efforts in all administrations. These Goals are universal and apply to all countries. In a report published in June 2016, the International Development Committee expressed concern about 'insufficient' progress towards domestic implementation so far and a 'worrying lack of engagement' by government departments (HoC, 2016a). In response, the UK Parliament has recently launched an inquiry into the domestic implementation of the UN Sustainable Development Goals.[7] These Goals include a number of targets which require governments to work towards reducing poverty under Goal 1: *End poverty in all its forms everywhere* and targets to reduce inequality under Goal 10: *Reduce inequality within and among countries.*[8] In September 2016 the UK government responded to the International Development Committee's report but rejected a number of the recommendations made, including a formal mechanism for government departments to work together on implementation (HoC, 2016b). In March 2017 the government set out its approach in a paper published by the Department for International Development (DfID, 2017). There is no evidence that the government has taken on the domestic challenge to tackle high levels of economic inequality and there appear to be no concrete plans to increase the income of the lowest 40% relative to higher income households by 2030. This is plain in the government's response to meeting Goal 10: Reducing Inequalities in the UK (reproduced below):

> *'At Home*
>
> *<u>Empowering and legislating against discrimination</u>*
>
> *The UK Government has already enacted some of the strongest equality and non-discrimination legislation globally, but we are committed to taking further action. We are seeking to introduce legislation that will pardon outdated same-sex convictions and we will continue to champion equality for Lesbian, Gay, Bisexual and Transgender people. We are*

halving the disability employment gap; and ensuring greater parity between men and women in the workplace.

Racial inequality

On 27 August 2016 the Prime Minister announced an audit to look into racial disparities in public service outcomes. The audit will review UK Government data to identify racial inequalities in outcomes from contact with all public services, and any gaps in data collection. It will publish all data in a single place so that the public can search the data to show inequalities in outcomes by geography, age or social-economic category.

Economic growth and participation by all

In October 2016 the UK Government launched a consultation 'Improving Lives' to look at how we can make progress on our ambition to halve the disability employment gap in the UK and, whether or not they have a long-term health condition or disability. It is fundamental to creating a society based on fairness: people living in more disadvantaged areas have poorer health and a higher risk of disability. It will also support our health and economic policy objectives by contributing to the UK Government's full employment ambitions, enabling employers to access a wider pool of talent and skills, and improving health.'

(DfID, 2017; pp.25–26)

3 MEASURING ECONOMIC INEQUALITY AND POVERTY

In this section we describe commonly used measures of economic inequality and poverty and how the two concepts are related.

Key points

- Different measures of income inequality are sensitive to inequality in different parts of the income distribution.
- Inequality measures sensitive to changes in the lower part of the income distribution are more likely, for purely mathematical reasons, to have a greater correlation with income poverty measures.
- Economic inequality extends beyond income. Earnings are, for most households, the main source of income. Wealth is accumulated over periods when income exceeds expenditure and through the receipt of lifetime gifts and inheritance. Social mobility is a measure of how inequality in one generation is transmitted to the next. All of these are important dimensions of economic inequality.
- Material deprivation now features in official measures of poverty alongside income-based measures. Other measures of poverty covered in this section include in-work poverty and area-based measures such as the index of material deprivation.

The measurement of economic inequality takes many forms in the literature, the most common being income inequality measured by the Gini coefficient, decile ratios or concentration based on income shares. In addition to the well-established literature focusing on inequality in financial flows, there is also a growing literature on the measurement of inequality in financial stocks (financial assets and debts), housing assets and mortgages, and other forms of wealth and liabilities. Wealth is much more unequally distributed than financial flows such as income and earnings, and countries with low income inequality can have very unequal distributions of household net wealth – for example Sweden (Hills *et al.*, 2013; Cowell, Karagiannaki and McKnight, 2017).

The review looks beyond aggregate measures of economic inequality to examine inequality trends for different sub-groups, drawing on work conducted in the Centre for Analysis of Social Exclusion (CASE) on the Equality Measurement Framework (EMF) (involving Tania Burchardt and Polly Vizard) and the Anatomy of Economic Inequality by the UK National Equality Panel (chaired by John Hills). The EMF, developed in CASE with the Equality and Human Rights Commission (EHRC), is theoretically grounded in the Capability Approach, developed by Amartya Sen, and the international human rights framework.

The EMF takes an equality perspective:

> *An equal society protects and promotes the central and valuable freedoms and real opportunities of each person, securing human rights for all and ensuring that no-one is unfairly disadvantaged.*
>
> *In an equal society, central and valuable freedoms and real opportunities are not unconstrained, but are limited by the need to guarantee the same freedoms and opportunities for all.*
>
> *In an equal society, institutions and individuals respect the diversity of people and their goals, address their different needs and situations, and remove the barriers that limit what people can do and can be.*
>
> (EHRC Equality Measurement Framework, Briefing note, 2009)[9]

The EHRC is particularly concerned with the position of individuals and groups with regard to characteristics such as age, disability, ethnicity, gender, religion or belief, sexual orientation, transgender (characteristics protected in the Equality Act 2010) and social class. Indicators within the EMF address three distinct aspects of inequality that can arise between individuals and groups: inequality of outcome, inequality of process and inequality of autonomy. Under the 'Standard of Living' domain, measures of relative income poverty, material deprivation and relative share of personal wealth are included for the indicator 'Poverty and Security of Income'.

The National Equality Panel (NEP) analysis of income, employment and education outcomes (originally published in 2010; Hills *et al.*, 2010) has since been updated in CASE as part of the Social Policy in a Cold Climate programme (Hills *et al.*, 2015). The NEP analysis focuses on economic inequalities between and within groups, providing time series and analysis. As the same groups are used by EMF, we draw on information from the two sources to examine the evolution of economic inequality and poverty within and between population groups.

Poverty measurement also takes a number of different forms. Income poverty can be measured in relative and absolute terms (against a fixed 'poverty line'). Poverty is usually assessed in relation to household income rather than personal income and therefore embodies the assumption that income is shared within households, or at least, where household income is low, all members of the household will be equally disadvantaged.[10] While this may not be the case, it is likely to be better than alternative measures such as individual income, which assumes no sharing between household members.

The most common measure of relative income poverty is the share of individuals living in households with net equivalised household income less than 60% of median net income (for example, this measure is reported in the UK Households Below Average Income (HBAI) series, equivalised to take into account differences in need based on family size and composition). Absolute income poverty measures typically use a fixed poverty line set at a point in time, which could be set in terms of a fixed income level based on an assessment of need, or in terms of a relative income poverty threshold at a point in time. Alternatively measures of poverty can be based on assessments of material deprivation and composite indices capturing multidimensional poverty.

3.1 DIMENSIONS OF ECONOMIC INEQUALITY

In this section we provide detail on the commonly used dimensions of inequality, the different meanings and their importance in understanding the relationship between inequality and poverty.

Income

Income is the most commonly used dimension of economic inequality. Income is typically assessed at the household level; income for all household members is summed over a standardised period of time, such as a month or a year. Household income is then equivalised using a scale to adjust for household size and composition (to adjust for differences in need) so that households can be compared on a like-for-like basis. There are a number of different equivalisation scales which vary in terms of the weight given to additional adults in the households and the weight given to dependent children at different ages. These scales include the square root of household size, the McClements scale, the OECD scale and the OECD modified scale. UK official statistics published in the HBAI series originally equivalised household income using the McClements scale but since 2006 have adopted the OECD modified scale.

Some studies examine inequality in market income (income from employment and wealth) to measure inequality pre-cash transfers and taxation. Inequality in market income can be compared to inequality in disposable income to estimate the impact of direct taxes and benefits on the distribution of income. However, it must be noted that market income is not the true counterfactual as households are likely to make alternative provision in the absence of cash transfers (for example, to cover loss of income resulting from unemployment and for retirement in the absence of unemployment benefits and state pensions). Gross income (sometimes referred to as final income) is an alternative measure, which is the sum of income from employment and capital, and cash transfers (pre-tax income).

Official UK income statistics are published before- and after-housing costs have been deducted. This allows analysts to assess how housing costs affect the distribution of income. This is important because some households have a low income but no housing costs, and some households face very high housing costs relative to their income.

Earnings

Earnings are frequently used to measure labour market inequality. They are typically analysed at an individual level but can be summed across all household members to produce a measure of household earnings. Earnings can be measured over different periods of time: annual, monthly, weekly or hourly. Some studies use gross earnings and some use net earnings (gross earnings less income tax and national insurance contributions).

Wealth

Wealth, like income, can be measured at an individual level, but is typically measured at a household level. There is no consensus on whether or not household wealth should be equivalised to adjust for differences in household size and composition or which equivalisation scale should be used. In general, total household wealth is reported with no equivalisation, although sometimes simply divided by the number of adults in the household. The assumption is that all members of a household benefit equally from the amount of wealth held within the household (e.g. a large property with a big garden in a nice location benefits all household members equally). Wealth is typically computed as the sum of housing wealth, financial wealth and physical wealth (which can include consumer durables, valuables and collectibles) and can be measured net of debt. Inequality of wealth tends to be considerably higher than inequality of income.

3.2 INEQUALITY MEASURES

In this section we assess the main measures of inequality used in the literature, highlighting their strengths and weaknesses, and offering a guide to interpretation. We begin here with simple definitions of the most commonly used measures of inequality.

Percentile ratios

One of the most commonly used measures of inequality is based on percentile ratios. Income observations within a population are ranked from lowest to highest and then the ratio of incomes at different points in the ranked distribution is computed. For example, the ratio of 90th percentile to the 10th percentile (or 90/10 ratio) is commonly used as a measure of income dispersion across the distribution; the 90/50 ratio is used as a measure of dispersion in the upper half of the distribution; and the 50/10 ratio is commonly used as a measure of dispersion in the lower half of the distribution. The advantage of percentile ratios as measures of inequality are their simple intuitive appeal and the fact that they are straightforward to communicate to non-specialist audiences. However, a single percentile ratio is based solely on income at two points of a distribution and ignores all other income observations.

Percentile ratios that measure dispersion in the lower half of the distribution (such as: 50/10; 50/25), particularly those that compare the median with a point lower down the income distribution, are most likely to be correlated with the most commonly used relative income poverty measure (share of individuals living in households with equivalised household disposable income less than 60% of the median). The lower income is at the lower percentiles, the higher the ratio and the greater the share of individuals likely to be under a relative income poverty threshold. This does not hold when the percentile ratio compares a point in the upper half of the distribution with a point in the lower half of the distribution. In this case, a higher measure of inequality could be driven by greater dispersion in the top half of the distribution, but the dispersion in the lower half could be compressed and therefore the share of individuals classified as poor could be low when inequality is high. It is also possible for inequality according to, for example, the 90/10 ratio to increase at the same time as a fall in the rate of relative income poverty. However, as we explore further in this review, underlying mechanisms driving the relationship between inequality and poverty may lead to future increases in poverty rates.

The Palma ratio, which is the ratio of the richest 10% of the population's share of income, divided by the share of income going to the poorest 40% of the population, is another commonly used inequality measure which is gaining in popularity. For example, the Scottish government has set a series of targets (Purpose Targets) against which progress towards achieving stated goals ('Purpose') are assessed.[11] Under the goal of improving solidarity is the target to 'increase overall income and reduce income inequality by 2017', using the Palma ratio to measure income inequality.

Through the mathematical relationship between many inequality and poverty measures, reducing the dispersion in the lower half of the income distribution should, at least initially, lead to a fall in income poverty rates; or, vice versa, reducing income poverty rates should reduce income inequality in the lower half of the income distribution. Beyond the mechanical relationship, there are mechanisms that help to explain why reducing inequality can lead to falls in poverty and we explore these further in this review.

Top income shares

The share of income held by those receiving the highest incomes provides a measure of the concentration of income among the most well-off members of a population. It provides only a partial picture of the distribution of income but has the advantage of being available over long periods of time. The most common top income shares that are reported in the literature are: top 10%, top 5%, top 1% and top 0.1%.

This measure of inequality provides no information on changes in the lower part of the income distribution and therefore levels of poverty. As we discuss below, mechanisms driving the relationship between inequality and poverty may mean that changes in top income shares have an impact on relative income poverty rates.

Absolute gaps

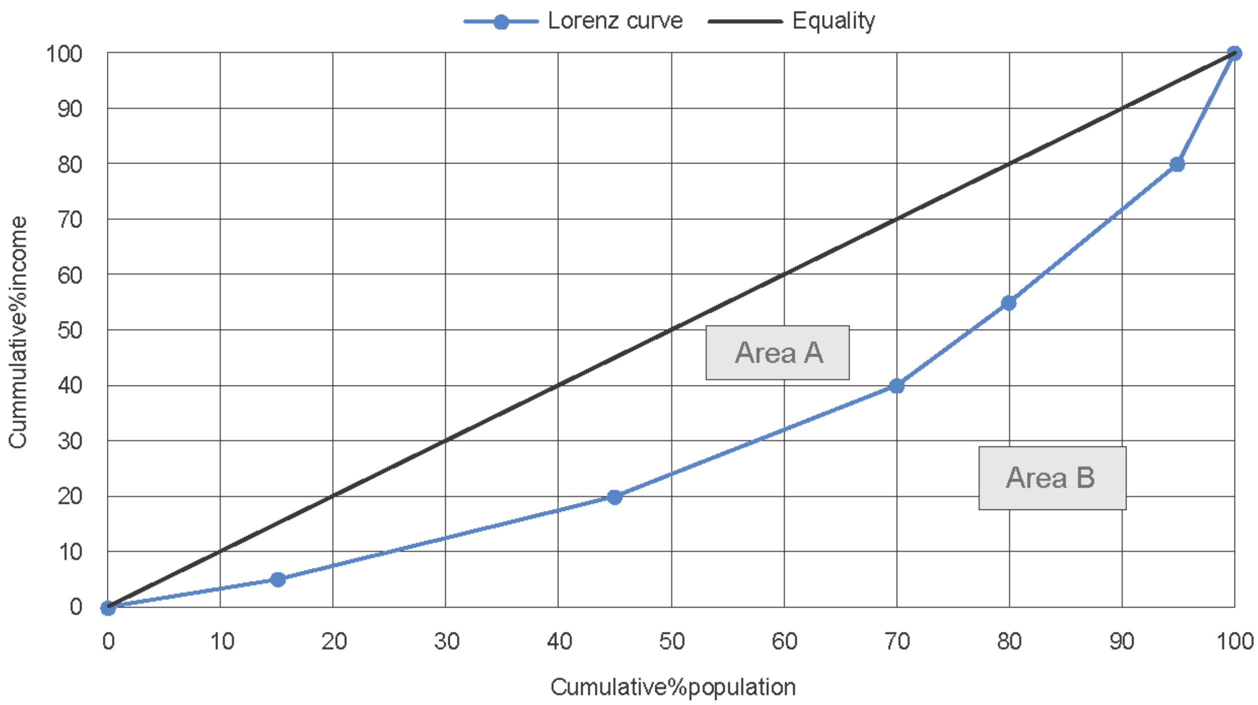
Another simple measure of inequality is an estimate of the size of the gap between individuals' incomes at different points in the distribution (these could be defined in terms of percentiles). This measure can also be defined as the gap between two levels defined by ratios of average income. It can provide additional information to relative measures of inequality and could measure gaps between poverty thresholds and other points in the distribution.

Gini coefficient

The advantage of the Gini coefficient over simple measures such as decile ratios and top income shares is that it summarises information on all income observations within a population. However, this information is also reduced to a single index number, which can mask a lot of detail.

The Gini coefficient can be represented graphically through its relationship with the Lorenz curve. Income observations are ranked from lowest to highest and the Lorenz curve shows the relationship between the cumulative share of the population and the cumulative share of income. In the example shown in Figure 1, point C shows that individuals living in households with income in the lowest 45% of the population, share between them only 20% of total income. In a population with complete equality the Lorenz curve would line up perfectly with the 45^0 line of absolute equality.

Figure 1: The Lorenz curve



The Gini coefficient can be computed by calculating the share of the area between the line of absolute equality and the Lorenz curve (Area A) to the area beneath the line of absolute equality (Area A plus Area B):

$$Gini\ coefficient = \frac{Area\ A}{(Area\ A + Area\ B)}$$

There are many mathematically equivalent ways to represent the Gini coefficient. For example, the Gini coefficient is mathematically equivalent to half the relative mean absolute difference. The mean absolute difference is the average absolute difference of all pairs of incomes in the population, and the relative mean absolute difference is the mean absolute difference divided by the average (to normalise for scale). This can be represented in the following equation. If x_i is the income of person i, and there are n persons, then the Gini coefficient G is given by:

$$G = \frac{\sum_{i=1}^{n}\sum_{j=1}^{n}\left|x_i - x_j\right|}{2\sum_{i=1}^{n}\sum_{j=1}^{n}x_j}$$

Gini coefficients for populations of non-negative incomes range between zero and one, where zero represents absolute equality and one represents the case where a single individual holds all the income.

Generalised entropy class of inequality measures

A further group of inequality indices is the generalised entropy (GE) class of measures:

$$GE(\alpha) = \frac{1}{\alpha(\alpha - 1)}\left[\frac{1}{N}\sum_{i=1}^{N}\left(\frac{y_i}{\bar{y}}\right)^{\alpha} - 1\right]$$

The values of GE measures vary between 0 and ∞; zero represents absolute equality and higher values represent higher levels of inequality. The parameter α in the GE class of inequality measures represents the weight given to distances between incomes at different points in the income distribution, and can take any real value. The parameter α is chosen by the analyst and can be seen as an indicator of 'inequality aversion'; greater inequality aversion is reflected in lower values of α (Sen, 1997; Atkinson, 1983). It also indicates the measure's sensitivity to transfers between individuals in different parts of the distribution. For lower values of α, GE is more sensitive to changes in the lower tail of the distribution, and for higher values GE is more sensitive to changes that affect the upper tail.

The commonest values of α used are 0, 1 and 2. GE(0) is also known as the mean logarithmic deviation (MLD), GE(1) is Theil's T index.

GE measures with a lower value of α are most likely to be sensitive to changes in poverty and therefore reduction in GE(0) is most likely to be associated with reductions in income poverty rates.

Social mobility

Social mobility provides a measure of inequality across generations, typically measuring the relationship between parents' outcomes and children's outcomes. Social class, income, earnings and education are the most common outcome measures used to assess social mobility. Social mobility is low where the position of children in the distribution of an outcome is close to that of their parents, and social mobility is high where there is little relationship between the position of children and that of their parents. Low rates of social mobility represent high inequality of opportunity. Cross-country studies have found that social mobility tends to be lower in countries where income inequality is higher (this has become known as the 'Great Gatsby Curve').

3.3 POVERTY MEASURES

In this section we discuss the relative merits of different measures of poverty, highlighting differences in relative and absolute measures of income poverty and material deprivation. We also provide some detail on single and composite measures and area-based measures (typically compiled from administrative data sources).

Income poverty

Although there has been some debate in government about how poverty should be defined and measured, most experts agree that at its core, poverty is a statement about lack of, or inadequate, financial resources, usually measured in the form of income (see Stewart and Roberts (2016) for a discussion of the recent government consultation on how official statistics should measure child poverty). Poverty thresholds can be set according to a relative measure (typically 60% of median income) or an absolute measure (such as a fixed income threshold set at a point in time). Central to the concept of relative income poverty is the notion that poverty is the lack of a level of income required to participate in society, and therefore poverty thresholds change as average income changes. However, while reference to change in the average standard of living over the medium or long term is desirable, short-term fluctuations can lead to anomalous results. For example, in the recent economic crisis, median income fell in some years and consequently relative income poverty rates fell, which seemed at odds with the experience of low-income households who were struggling as their real incomes fell. This example highlights the advantage of reporting both relative and absolute measures of income poverty to provide a clearer picture of short- as well as long-run trends.

Poverty gaps are frequently used in the literature alongside poverty headcount measures to provide additional information on the depth of poverty and to assess the extent that income needs to be increased for those beneath the poverty threshold to reduce income poverty rates.

Material deprivation

Material deprivation is a measure of the inability of individuals or households to afford goods and activities that are typical in a society at a given point in time. It can be used in conjunction with income poverty measures or in place of these measures.

There is a variety of different measures of material deprivation that vary according to the goods and activities that are included in the scale. The EU uses a measure of material deprivation to gauge the proportion of people whose living conditions are severely affected by a lack of resources. The severe material deprivation rate represents the proportion of people living in households that cannot afford at least four of the following nine items:

1. mortgage or rent payments, utility bills, hire purchase instalments or other loan payments;
2. one week's holiday away from home;
3. a meal with meat, chicken, fish or vegetarian equivalent every second day;
4. unexpected financial expenses;
5. a telephone (including mobile telephone);
6. a colour TV;
7. a washing machine;
8. a car; and
9. heating to keep the home sufficiently warm.

In the UK there are two official measures of material deprivation published as part of the HBAI series, one which has been developed specifically to examine material deprivation among families with children and the other for pensioners. For families with children, a material deprivation score is calculated using a series of 21 questions (see DWP, 2016, p. 28, for details on how this score is calculated and weighted using prevalence weights). Each question asks whether or not the family is able to afford and wants a particular item. The choice of the 21 items was based on independent research (McKay and Collard, 2003). Naturally, the items (goods or activities) that are regarded as necessities for families with children for which items-enforced absence (through lack of money) constitute deprivation, changes over time. A review conducted in 2009 (McKay, 2011) led to four of the original questions being replaced from 2011/12. This creates a break in the series but is essential for keeping the measure up to date. The items included in both periods are shown in Table 1.

The UK HBAI series combines material deprivation with a measure of low income. A child is considered to be in low income and material deprivation if they live in a family that has a final material deprivation score of 25 or more and an equivalised household income below 70% of contemporary median income, before-housing costs. A child is considered to be in severe low income and material deprivation if they live in a family that has a final material deprivation score of 25 or more and an equivalised household income below 50% of contemporary median income (before-housing costs).

Table 1: Items in child material deprivation index

Original set of items from 2004/05	2011/12 changes
Child items	
Outdoor space/facilities to play safely	
Enough bedrooms for every child 10 years of age or over and of a different gender	
Celebrations on special occasions	
Leisure equipment such as sports equipment or a bicycle	
At least one week's holiday away from home with family	
Hobby or leisure activity	***Replaced by*****:** Eat fresh fruit and/or vegetables every day
Swimming at least once a month	***Replaced by*****:** Attend at least one regular organised activity a week outside school, such as sport or a youth group
Have friends round for tea or a snack once a fortnight	
Go on school trip at least once a term	
Go to a playgroup at least once a week	
	Addition: Have a warm winter coat
Adult items	
Money to decorate home	
Hobby or leisure activity	
Holiday away from home one week a year not with relatives	
Home contents insurance	
Friends round for drink/meal at least once a month	***Replaced by:*** Keep up with bills and any regular debt repayments
Make savings of £10/month or more	
Two pairs of all-weather shoes for each adult	***Removed***
Replace worn-out furniture	
Replace broken electrical goods	
Small amount of money to spend on self each week	
Keep house warm in winter	

Material deprivation for pensioners has been measured in the HBAI series since May 2008 based on a suite of questions designed to capture material deprivation experienced by pensioner families (Table 2). Respondents are asked whether they have access to 15 goods and services (see Legard, Gray and Blake, 2008 and DWP, 2016 for further details). If pensioners do not have a given item (because of cost, health or availability) this is scored in the material deprivation measure, with items more commonly owned in the population given a higher weighted score. A pensioner is considered to be materially deprived if they live in a family that has a final score of 20 or more out of 100.[12]

Table 2: Items in pensioner material deprivation index

At least one filling meal a day
Go out socially at least once a month
See friends or family at least once a month
Take a holiday away from home
Able to replace cooker if it breaks down
Home kept in good state of repair
Heating, electrics, plumbing and drains working
Have a damp-free home
Home kept adequately warm
Able to pay regular bills
Have a telephone to use, whenever needed
Have access to car or taxi, whenever needed
Have hair done or cut regularly
Have a warm waterproof coat
Able to pay an unexpected expense of £200

Asset poverty

Asset poverty is a measure based on lack of assets. It may be defined simply in terms of financial assets but may also include housing assets and measures of debt.

In-work poverty

There is no uniform definition of 'in-work poverty', and different studies take different approaches. The standard European definition classifies individuals as poor (or 'at risk of poverty') if they live in households with equivalised income below 60% of national household median income. Eurostat defines individuals as being 'in work' if they were working for at least seven months during the income reference period of one year. Other in-work definitions exist which use current employment status, and include those actively looking for work (US Bureau of Labor and Statistics) or those working continuously for 12 months or more.

Composite/multidimensional poverty measures

Composite measures combine more than one dimension of poverty to produce a summary statistic. For example, material deprivation indices combine a number of different items to form a scale which can be further combined with low-income status, as is the case in the UK statistics for children. Other multidimensional measures incorporate a variety of factors that constitute poor people's experience of deprivation – such as poor health, lack of education, inadequate living standard, lack of income, disempowerment, poor quality of work and threat from violence (see, for example, multidimensional poverty measures developed by researchers at the Oxford Poverty and Human Development Initiative[13]). The difficulty with composite measures is deciding which items to include and how much weight to give to each individual item within an index. A substantial amount of information is typically reduced down to a single value, and important information can be lost in the process.

Area-based measures/index of multiple deprivation

The geography of poverty can be mapped and analysed using different sized spatial units below country level – regions, politically defined/administrative units (e.g. wards or constituencies), cities, travel-to-work areas, neighbourhoods – for single poverty measures or for composite measures. Deprivation is the lack of access to opportunities and resources expected within society.

The index of multiple deprivation combines information on a number of different measures of deprivation aggregated within spatial units. Official variants have been derived for England, Wales, Scotland and Northern Ireland.

The Scottish Index of Multiple Deprivation (SIMD) combines seven different domains (aspects) of deprivation:

- employment;
- income;
- health;
- education, skills and training;
- geographic access to services;
- crime;
- housing.

A number of indicators within each of these domains is used to form individual relative indices for each particular dimension of deprivation. For each domain, geographic units are ranked from most deprived to least deprived. Each of the seven indices is then combined to form the overall SIMD.

The Welsh Index of Multiple Deprivation combines information on the following eight dimensions of deprivation:

- income;
- employment;
- health;
- education;
- access to services;
- community safety;
- physical environment;
- housing.

The domains relate to both material and social aspects of deprivation. Material deprivation is the lack of access to sufficient physical resources – food, shelter, and clothing – necessary to sustain a certain standard of life. Social deprivation refers to the ability of an individual to participate in the normal social life of the community.

For Northern Ireland, the Northern Ireland Multiple Deprivation Measure (NIMDM) 2010 is made up of 52 indicators mostly relating to the period 2007–09. The indicators are grouped into seven types or 'domains' of deprivation weighted as follows:

- income deprivation (25%);
- employment deprivation (25%);
- health deprivation and disability (15%);
- education, skills and training deprivation (15%);
- proximity to services (10%);
- living environment (5%);
- crime and disorder (5%).

The English Indices of Deprivation 2010 are measures of multiple deprivation at the small area level. The model of multiple deprivation which underpins the Indices of Deprivation 2010 is based on the idea of distinct domains of deprivation which can be recognised and measured separately. These domains are experienced by individuals living in an area. People may be counted in one or more of the domains, depending on the number of types of deprivation that they experience. Each domain represents a specific form of deprivation experienced by people, and each can be measured individually using a number of indicators. Seven distinct domains are identified in the English Indices of Deprivation:

- income deprivation;
- employment deprivation;
- health deprivation and disability;
- education, skills and training deprivation;
- barriers to housing and services;
- living environment deprivation;
- crime.

Individual domains can be used in isolation as measures of each specific form of deprivation. They can also be combined, using appropriate weights, into a single overall Index of Multiple Deprivation which can be used to rank every small area in England according to the deprivation experienced by the people living there. Along with two supplementary indices, Income Deprivation Affecting Children Index and Income Deprivation Affecting Older People Index, they form the English Indices of Deprivation. These statistics allow the most, and least, deprived areas of the country to be identified, as well as providing information about the issues faced by people living in different parts of the country.

4 TRENDS IN ECONOMIC INEQUALITY AND POVERTY

In this section we examine trends in economic inequality and poverty in the UK, concentrating on income, material deprivation, earnings and wealth.

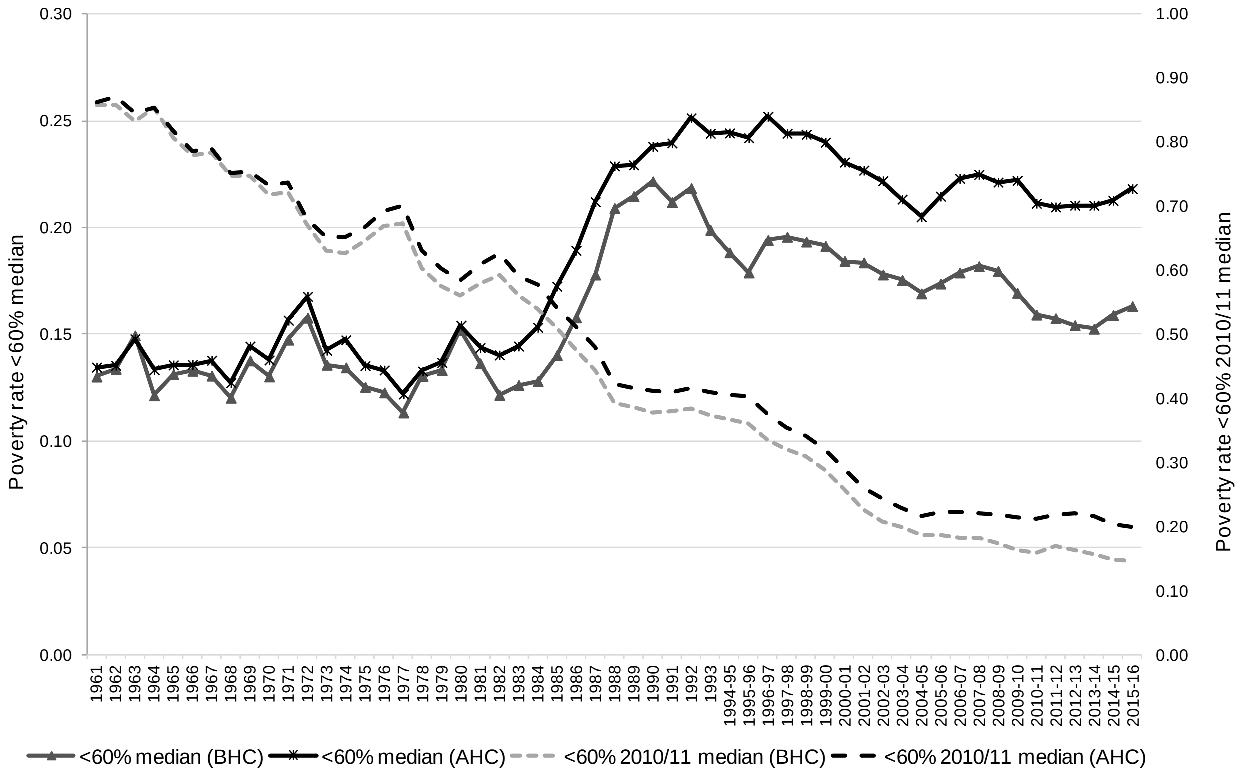
Key points

- Earnings inequality and the incidence of low pay increased dramatically over the period that income inequality increased most (1980s).
- Rising housing costs among low-income households have led to a widening gap between before- and after-housing costs measures of income poverty and income inequality.
- The share of employees in low-wage employment has remained fairly stable at around one in five since the late 1990s, and increases in relative earnings inequality has been more muted since the 1990s.
- More than half of all working age adults living in low-income households are now in work, although the risk of poverty remains highest for workless households.
- Although the main increase in the dispersion of income occurred over the 1980s, concentration of incomes among a small minority of individuals continued to increase up to the financial crisis; wealth gaps have widened and concentration of wealth among a small elite continues to increase.

4.1 POVERTY TRENDS

Figure 2 shows the trend in relative and absolute income poverty rates where household income is measured before- and after-housing costs. Relative income poverty rates before-housing costs virtually doubled over the 1980s (12% in 1982 to 22% in 1990). From the early 1980s the trends in before- and after-housing costs measures of poverty diverged with higher rates observed for after-housing cost income measures. This gap widened further from the early 1990s. This reflects the cost of housing as a share of income increasing disproportionately among lower income households. The high rates of relative income poverty declined after the peak rates observed in the 1990s (1992 and 1996/97 for relative income poverty rates after-housing costs when they reached 25%), falling further and earlier for before-housing cost measures. Before-housing costs relative income poverty rates fell to 15% in 2013/14, with recent falls driven mainly by falls in median income following the 2007/08 financial crisis (the poverty line fell in line with declining average income and this resulted in falls in relative income poverty rates – Belfield *et al.*, 2014). However, over the last two years for which data are available (2014/15 and 2015/16) relative income poverty rates before- and after-housing costs have risen and are now at their highest level since 2009/10. Absolute income poverty rates, where the 60% median level of income is fixed in terms of the 2010/11 median value of income, have fallen due to rising real incomes. However, the decline halted in the early 2000s, well before the recent financial crisis and the gap between before- and after-housing cost measures for absolute income poverty rates widened as before-housing cost rates continued to fall very gradually but after-housing costs rates did not; again reflecting rising housing costs among lower income households.

Figure 2: Trends in relative and absolute income poverty rates – before- and after-housing costs measures



Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.

Notes: Derived from data in the Family Expenditure Survey (FES) up to and including 1993–94, and the Family Resources Survey (FRS) thereafter. Incomes are measured net of direct taxes and inclusive of state benefits and tax credits, and at the household level. Income is equivalised using the OECD modified scale. These data are for GB up to 2001/02 and the UK thereafter. Before-housing costs (BHC) and after-housing costs (AHC) incomes are adjusted for inflation using variants of the Consumer Price Index that includes and excludes all housing costs, respectively.

Table 3 shows the official statistics on material deprivation among children and pensioners. As discussed in Section 3, there has been a change in the questions used to measure material deprivation among children, creating a break in this series from 2010. In 2010/11 material deprivation is measured using information from the original set of questions and the new suite of questions and it is clear that the move to the new set of questions resulted in lower estimates of low income and material deprivation. Material deprivation rates among children did increase over the economic downturn and then fell after 2009. However, because the official statistics combine material deprivation with low-income measures this is driven by the fall in relative income poverty we observe in Figure 2. Separate independent analysis has examined material deprivation rates exclusive of low-income status and this finds both higher rates of material deprivation (around 25% prior to the economic downturn), increasing to around 27% without the falls observed in the combined series (Belfield *et al.*, 2016, p.64). There is also a much greater increase in 2012/13 and a fall in 2014/15. Material deprivation rates among pensioners was first measured in 2009/10 and for the first three years rates fell, since then rates have remained relatively stable at around 8%.

Table 3: Trends in UK material deprivation for children and pensioners

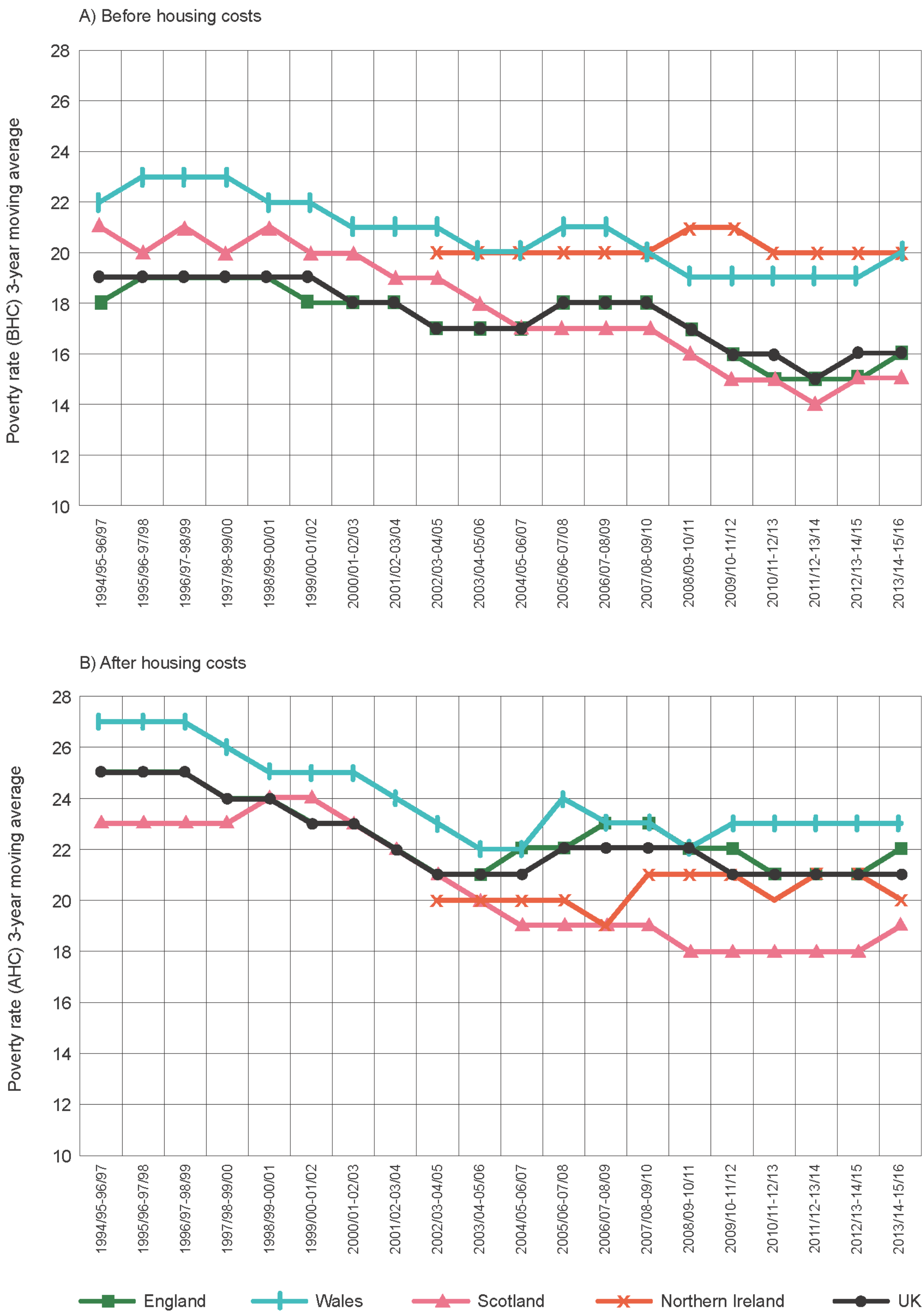
	Children				**Pensioners** (aged 65+)
	Low income and material deprivation		Severe low income and material deprivation		
	Original questions	New suite of questions	Original questions	New suite of questions	
2004/05	17%		6%		
2005/06	16%		6%		
2006/07	16%		6%		
2007/08	17%		6%		
2008/09	18%		6%		
2009/10	16%		5%		10%
2010/11	15%	13%	4%	4%	9%
2011/12		12%		3%	8%
2012/13		13%		4%	8%
2013/14		13%		4%	9%
2014/15		13%		4%	8%
2015/16		12%		4%	8%

Source: Households Below Average Incomes: 1994/95-2015/16 (DWP, 2017)

Notes: Low income is defined as an equivalised household income below 70 percent of contemporary median income, before-housing costs. Severe low income is defined as an equivalised household income below 50% of contemporary median income, before-housing costs.

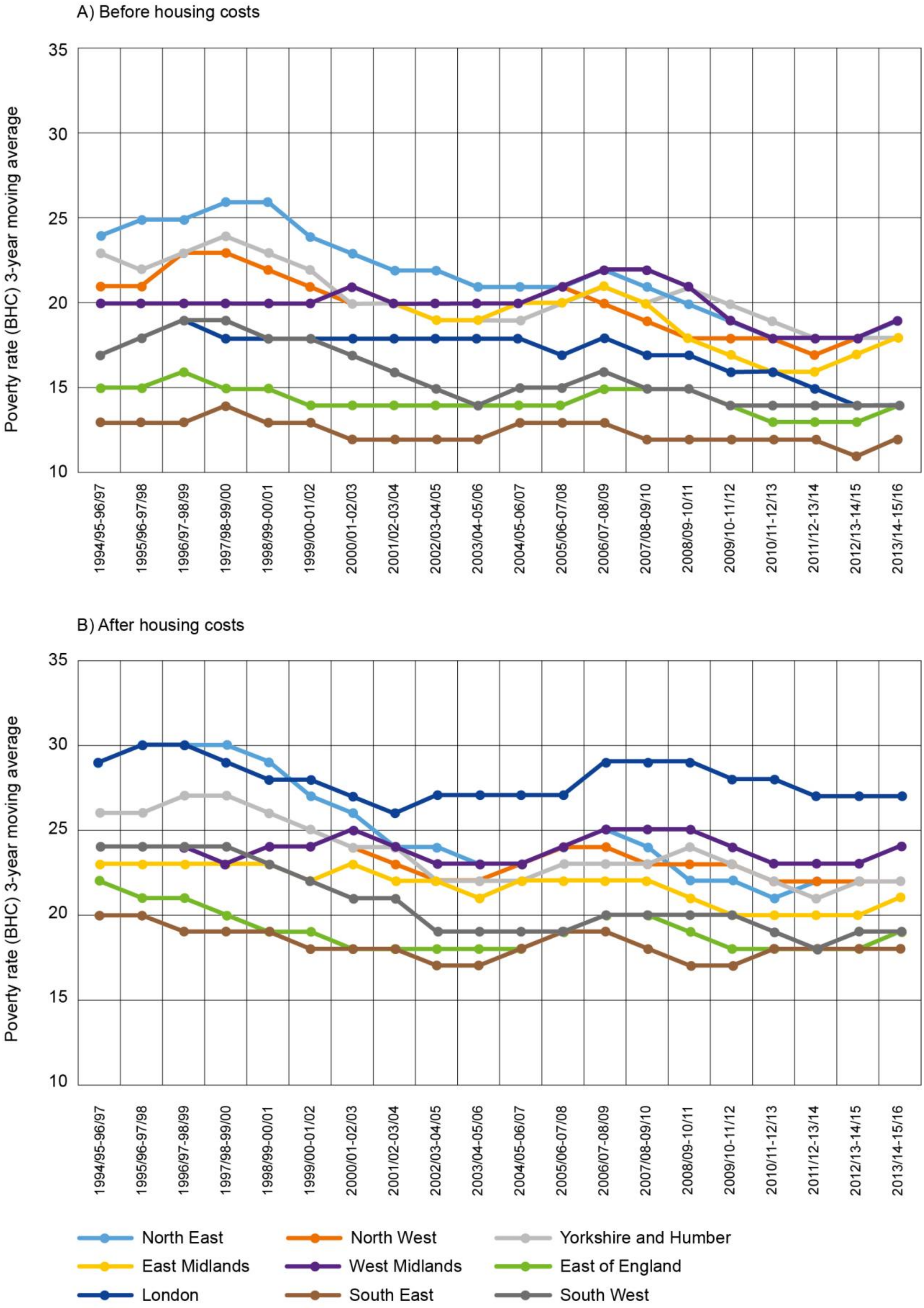
Official statistics on low-income (poverty) rates are published as part of the HBAI series for UK constituent countries from 1994/95 (Northern Ireland from 2002/03). Rates are computed for three-year moving averages as sample sizes are smaller than for UK statistics.[14] Examining first the series where income is measured before-housing costs, we observe that relative income poverty rates are higher in Wales and Northern Ireland than in England or Scotland and the gap has widened since the 2007/08 financial crisis; neither Wales nor Northern Ireland experienced the same falls in poverty rates as in England and Scotland (Figure 3a). The most recent observation (2013/14–2015/16) shows an increase in poverty rates in Wales and England, with stable rates in Northern Ireland and Scotland. Turning to the after-housing cost measure, we note higher income poverty rates within all UK constituent countries (Figure 3b). A gap in poverty rates between England and Scotland opens up after 2002/03–04/05 as a result of falls in poverty rates in Scotland and increases in England. This is not observed in the before-housing cost series and therefore reflects a relative increase in the housing costs of low-income households in England relative to Scotland. The most recent information available shows an increase in poverty rates in England and Scotland.

Figure 3: Trends in relative income poverty rates within the UK



Source: DWP (2017); Households below average income: 1994/95–2015/16

Figure 4: Trends in relative income poverty rates within English regions



Source: DWP (2017); Households below average income: 1994/95 to 2015/16

We are also able to examine trends in relative income poverty rates within English regions. For the before-housing cost measure we observe some convergence in relative income poverty rates across English regions over this 20–year period. This is driven by greater falls in those regions where poverty rates were initially higher, such as the North East and Yorkshire & Humber. In the most recent period, 2013/14–2015/16, relative income poverty rates before-housing costs are highest in the West Midlands (19%) and lowest in the South East (12%). In the after-housing costs series (Figure 4b) we also observe falls in relative income poverty rates and a convergence in rates across English regions outside London. However, what is very striking is the high cost of housing for low-income households in London, which results in London having the highest after-housing costs poverty rates and a clear divergence between London and other English regions, which opens up from 2001/02 to 2003/04.

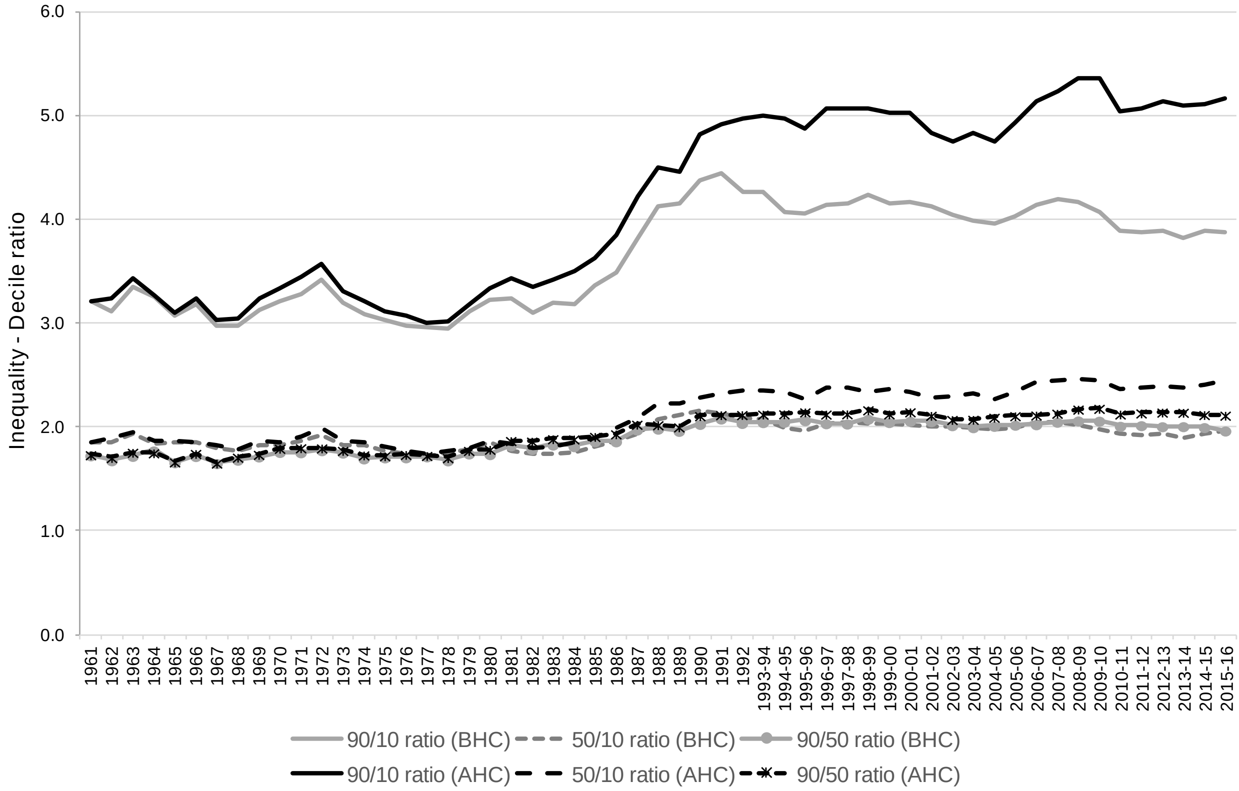
4.2 INEQUALITY TRENDS

Household income

Figure 5 and Figure 6 present trends in different measures of household income inequality based on ratios of different percentiles in the income distribution and two inequality indices (Gini coefficient and mean log deviation) for income measured before- and after-housing costs. The main period of rising income inequality, like income poverty, occurred over the 1980s, and these measures show that relative income inequality has remained relatively stable since the early 1990s. All inequality measures are higher for the after-housing costs measure of income, reflecting the greater cost of housing relative to income for lower income households.

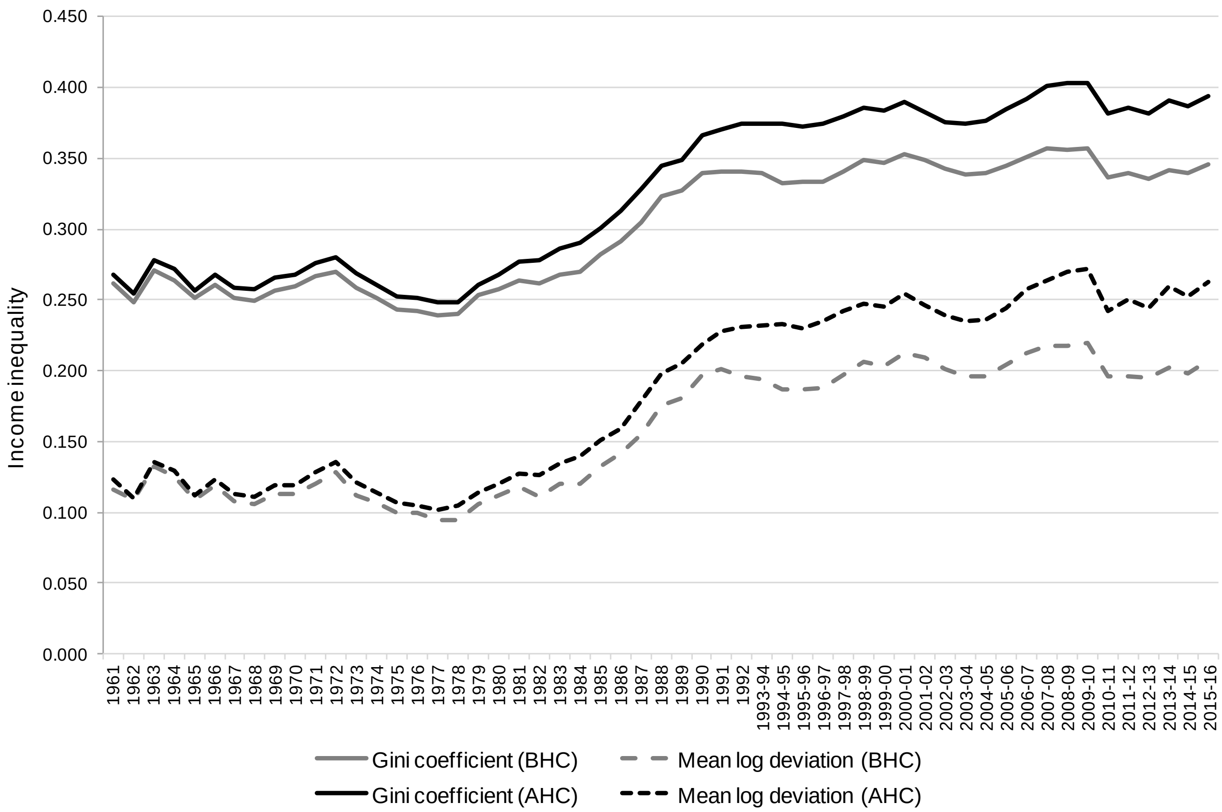
A widening gap emerges between the before- and after-housing cost measures of income inequality from the late 1970s and particularly after the early 1990s. Inequality increased during the first few years of the recent economic downturn, particularly when income is measured after-housing costs, but since fell back to roughly pre-financial crisis levels (depending to some extent on the inequality measure and whether income is measured before- or after-housing costs) but over the last year (2014/15–2015/16) after-housing costs income inequality measured by 90/10 ratio and the 50/10 ratio has risen. We also observe an increase in inequality over the last year for income inequality measured by the Gini coefficient and the mean log deviation for both the before- and after-housing costs measures of income (Figure 6). These recent trends suggest that income inequality (according to these measures) over the last ten years following the financial crisis initially fell (mainly driven by cash transfers protecting the incomes of those at the bottom of the distribution and the impact of falling real earnings on higher income households (Cribb et al., 2013)). As employment recovered and austerity increased the overall impact on inequality was mixed and inequality fluctuated. The most recent projections from the Institute for Fiscal Studies are that income inequality will increase further over the next five years (Hood and Waters, 2017).

Figure 5: Trends in income inequality (decile ratios) – before- and after-housing costs measures of income



Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.
Notes: See Figure 2 notes.

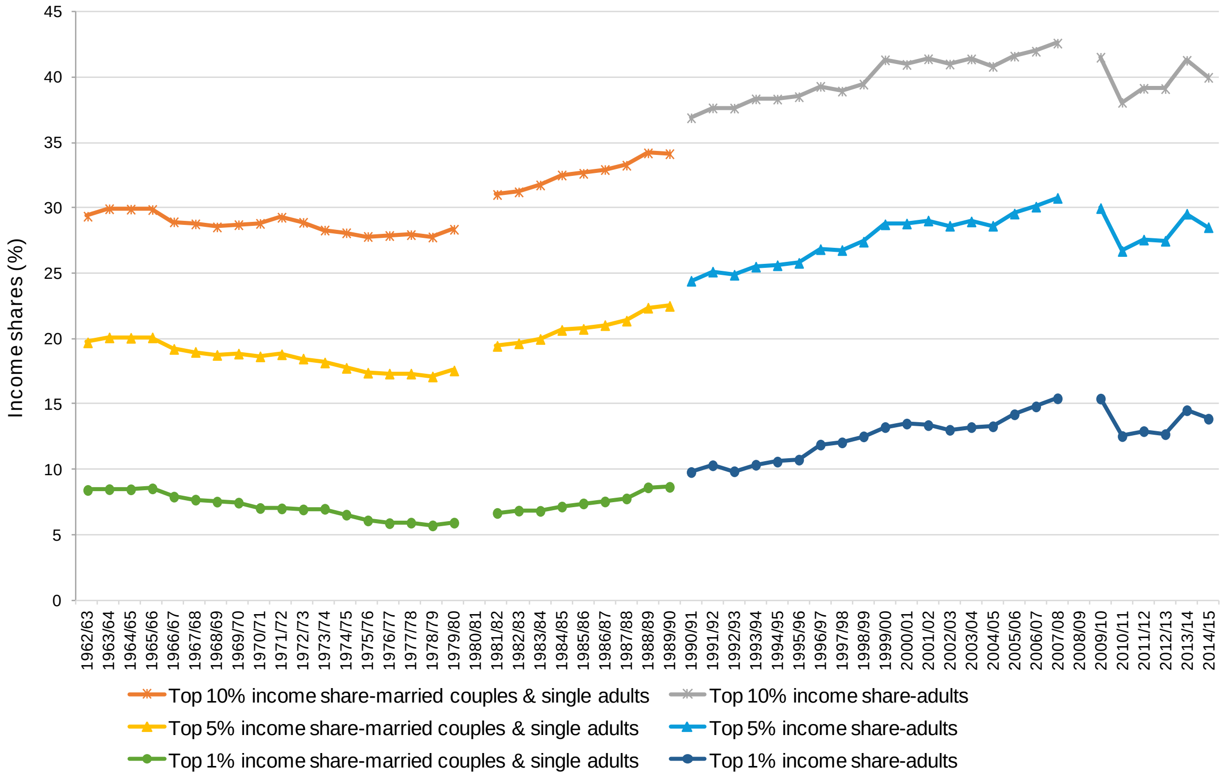
Figure 6: Trends in income inequality (Gini coefficient and mean log deviation) – before- and after-housing costs measures of income



Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet, 2017.
Notes: See Figure 2 notes.

Inequality can also be measured in terms of the concentration of income among individuals at the top of the income distribution. Figure 7 presents trends in the top 10%, 5% and 1% shares. Top income shares fell gradually up to the late 1970s but have increased dramatically since then. For example, in 1981 the income received by the top 10% accounted for 31% of total income, and this increased to 34% in 1984. A break in the data series prevents us from calculating comparable figures across the whole time period but we can calculate the change between 1990 and 2007, when the top 10% increased their share of total income by nearly 6 percentage points. In 2007 the top 10% accounted for more than four times their share (43%) of income, if income was shared equally across the distribution. Over the same period the top 1% increased their share of total income from 9.8% to 15.4%, accounting for more than 15 times their share of income, if income was shared equally across the distribution. In contrast to measures of inequality presented in Figures 3–6 which showed that the main increase in inequality occurred over the 1980s, top income shares continued to increase dramatically up to the 2007/08 financial crisis. Between 2009 and 2010 we observe a large fall in income shares and then subsequent increases in 2013/14. This appears to be more to do with income-forestalling or income-delaying in response to changes in the top rate of income tax. In March 2009, it was announced by the Labour government that the top rate was to be raised from 40 to 50% with effect from April 2010, and this led to considerable forestalling of income in 2009–10. In March 2012, it was announced by the Conservative government that the top rate was to be reduced to 45% with effect from April 2013, which again provided an incentive for income to be moved between tax years, in that case from 2012–13 to 2013–14.[15]

Figure 7: Trends in top income shares



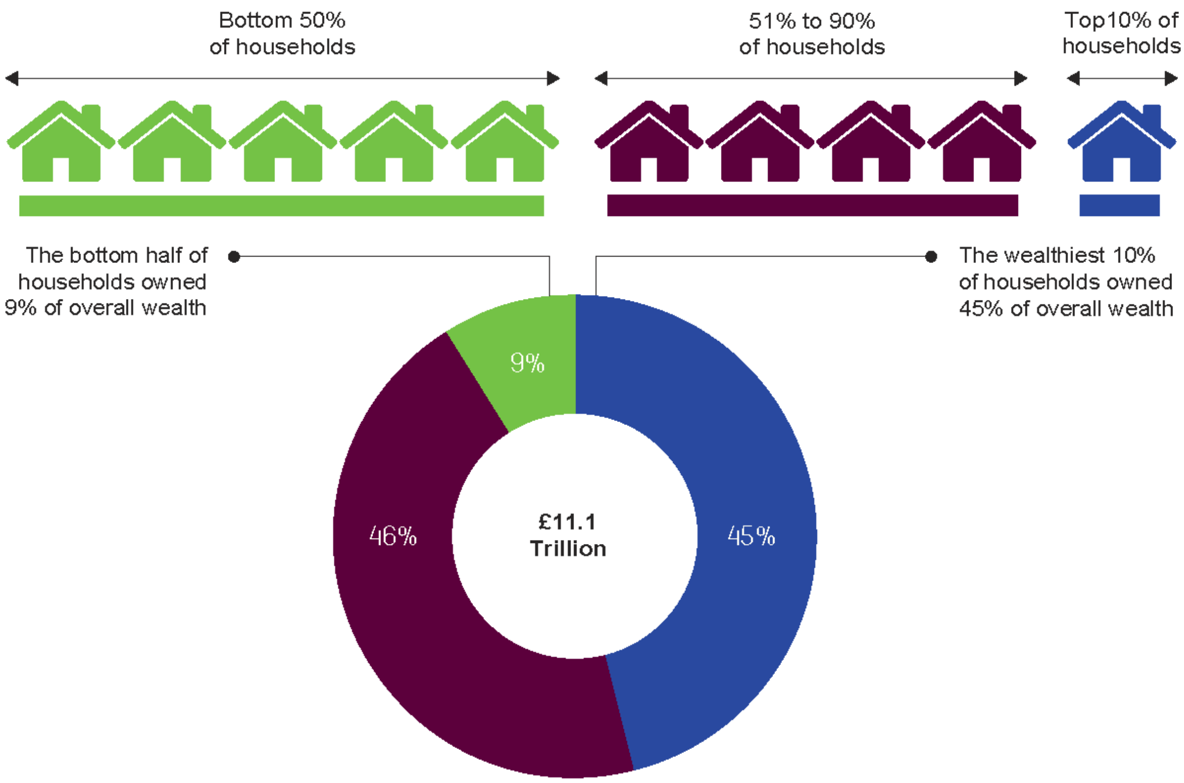
Source: The World Wealth and Income Database. Facundo Alvaredo, Anthony Atkinson, Thomas Piketty, Emmanuel Saez and Gabriel Zucman.

Notes: Until 1974, estimates relate to income net of certain deductions; from 1975, estimates relate to total income. Until 1989 original estimates relate to tax units (married couples and single adults), while, from 1990, original estimates relate to adults. There are no observations for 1980 or 2008. Original source: Atkinson, Anthony B. (2007). *The Distribution of Top Incomes in the United Kingdom 1908–2000*; in A. Atkinson and T. Piketty (editors) *Top Incomes over the Twentieth Century. A Contrast Between Continental European and English-Speaking Countries*, Oxford University Press, chapter 4. Series updated by the same author (2012–15, Methodological Notes). The authors would like to thank Facundo Alvaredo for supplying updated top income shares series for the UK.

Household wealth

Household wealth is much more unequally distributed in the UK than income or earnings. Figure 8 shows the distribution of total household wealth in Great Britain 2012/14 drawn from data collected in the Wealth and Asset Survey. This measure of wealth includes net property wealth, net financial wealth, pension wealth and physical wealth. It does not include business assets or a valuation of entitlement to state pensions. The wealthiest 10% of households were found to own 45% of total household wealth, while the bottom half of households owned, between them, only 9%. The 90:10 ratio for total household wealth in 2012/14 was 83 – a household at the 90th percentile held wealth worth 83 times greater than the wealth held by a household at the 10th percentile. In contrast, the 90:10 ratio for household income measured after-housing costs in 2012/13 was 5.2 (see Figure 5). The Gini coefficient for total household wealth is 0.63, which is nearly double the Gini coefficient for total household net equivalised income 0.33 (ONS, 2015).

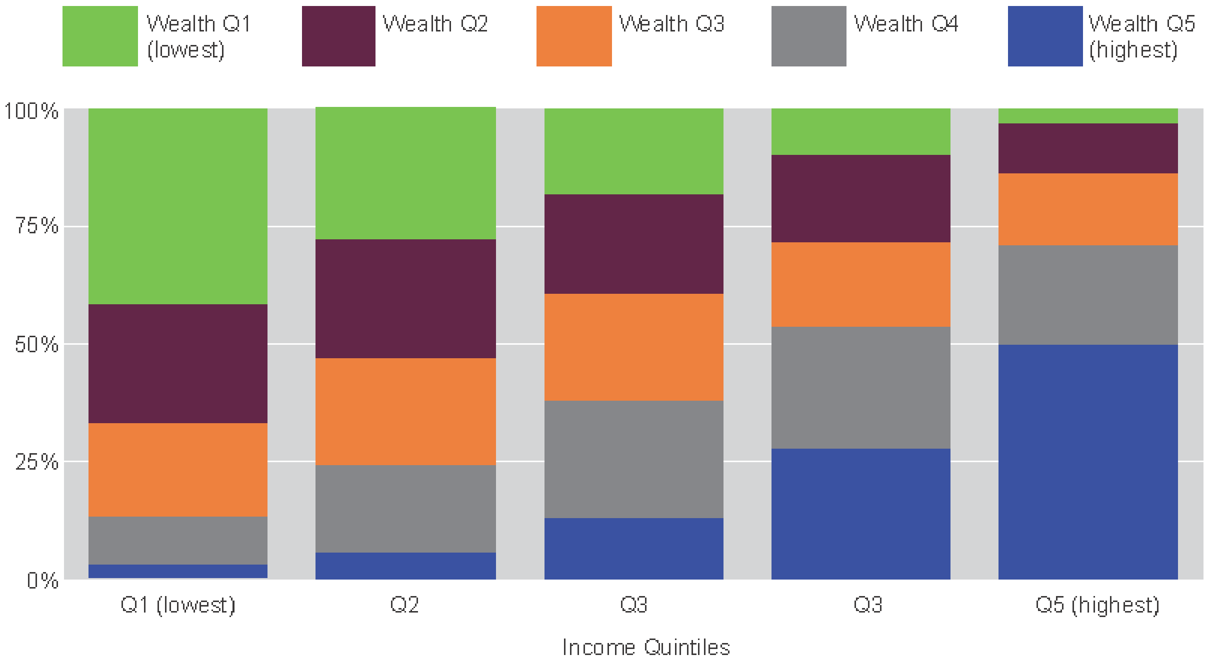
Figure 8: The distribution of total household wealth in Great Britain – 2012/14



Source: ONS (2015) reproduced from Compendium: Main results from the Wealth and Assets Survey: July 2012 to June 2014, Figure 1.

Although high-income households are also more likely to be high-wealth households than low-income households, the mapping is not one-to-one. Figure 9 shows the relationship between income quintiles and wealth quintiles in 2012/14.

Figure 9: The distribution of total household wealth, by total household net equivalised income quintile – 2012/14 (GB)



Source: ONS (2015) reproduced from Compendium: Chapter 7: Extended Analyses, Wealth in Great Britain, 2012 to 2014, Figure 7.5.

Between 2010/12 and 2012/14, aggregate total household wealth increased by 18%. The ONS estimates that over one-quarter of this increase was due to increases in private pension wealth (the increase was 13% when private pension wealth is excluded) (ONS, 2015). As the figures in Table 4 show, total household wealth increased in each of the wealth bands, although the increases for the wealthiest 10% of households were considerably higher (21%) than for the least wealthy 50% of households (7%). These differences in growth rates meant that wealth became more unequally distributed in Great Britain over this time period.

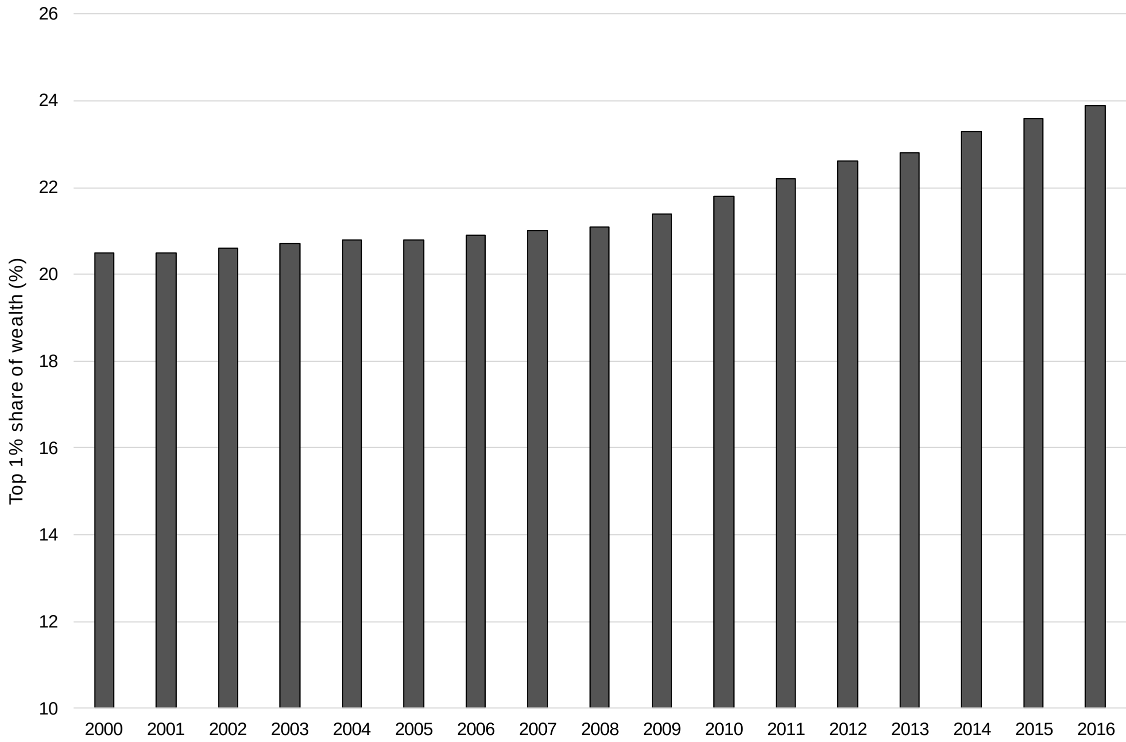
Table 4: Changes in household wealth 2010/12–2012/14

Great Britain, July 2010 – June 2014		
	July 2012 – June 2014	**July 2010 – June 2012**
	£ billion	
Least wealthy 1% – 50%	969	904
Middle wealth 51% – 90%	5,177	4,425
Wealthiest 10%	4,990	4,115
All households	11,134	9,444
	£	
Median total wealth	225,090	216,542

Source: ONS (2015) reproduced from *Compendium: Main results from the Wealth and Assets Survey: July 2012 to June 2014*, Table 1.

Estimates of the concentration of household wealth are available from 2000 (Figure 10). This series shows very high concentration of wealth with just over one-fifth of all private wealth held by 1% of the population in 2000. This high concentration of wealth has increased since the financial crisis with the latest estimate showing that nearly 24 percent of all private wealth was held by only 1% of the population in 2016.

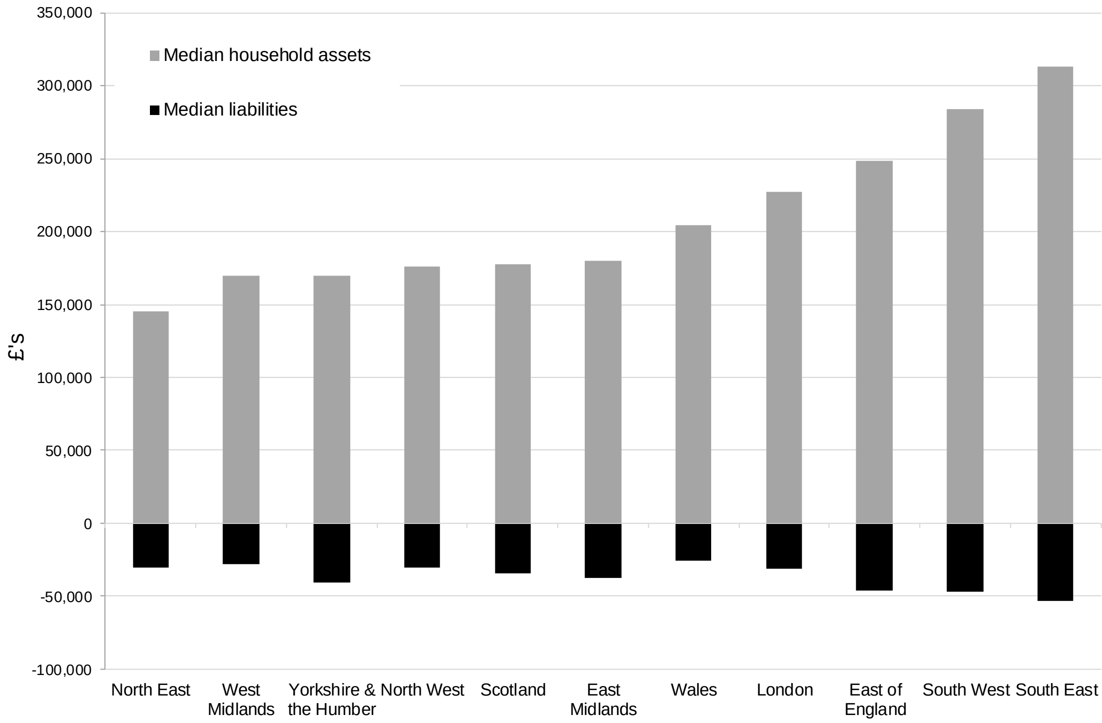
Figure 10: Concentration of household wealth – top 1% share 2000–2016



Source: Credit Suisse Global Wealth Databook (various years).

Average levels of household wealth and liabilities vary across the UK. Figure 11 shows higher median levels of household wealth in the South East and South West of England and much lower median levels of household wealth in the North East of England and the West Midlands. Housing assets and pension assets account for the majority of household wealth holdings and therefore the variation observed reflects differences in house prices, earnings (due to the link with pensions) and age (wealth tends to increase with age up to retirement age before starting to decline, and therefore older populations tend to be wealthier).

Figure 11: Median levels of household liabilities and assets from the wealth and assets survey 2012–14

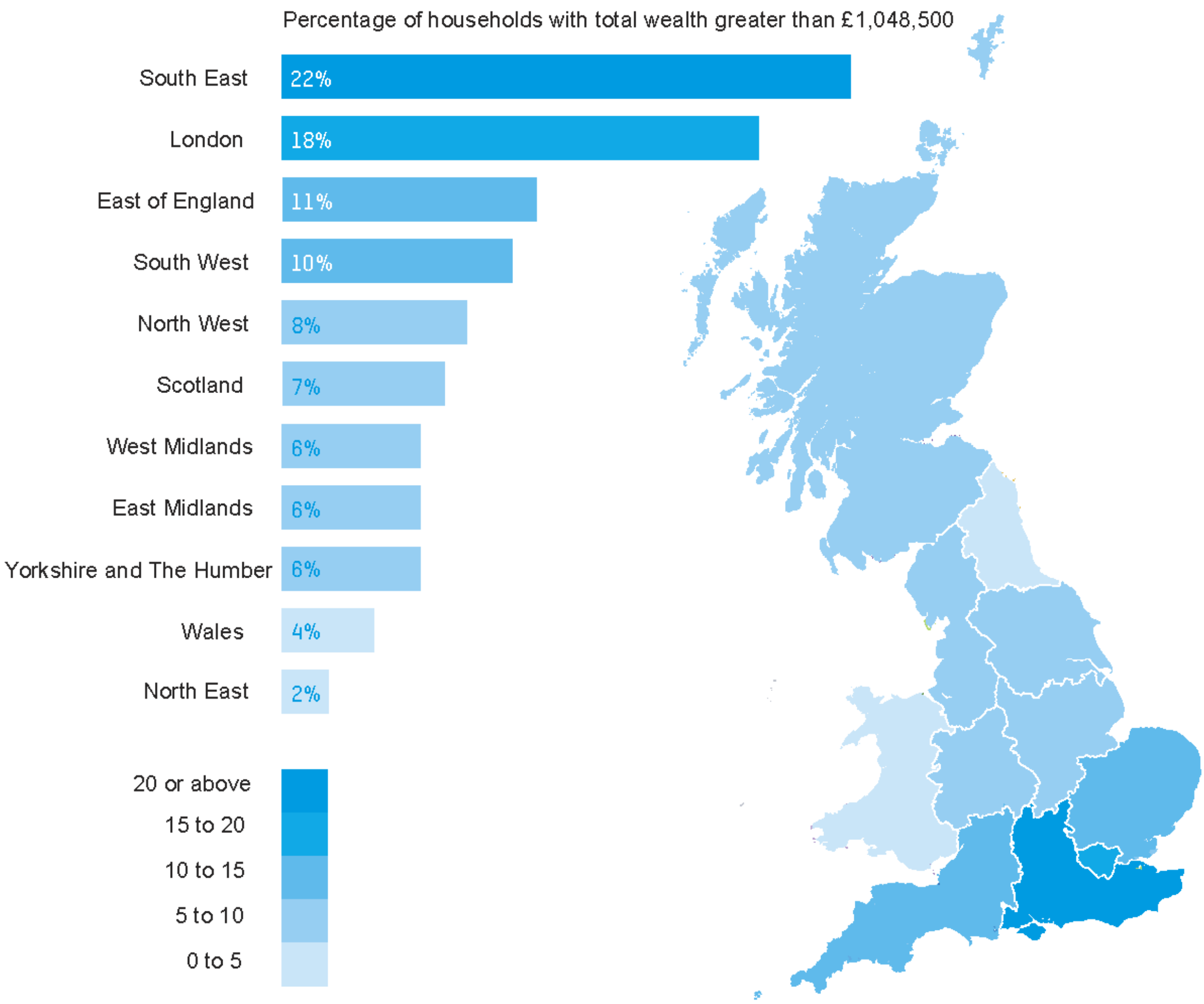


Source: ONS (2016) Household liabilities and assets from the wealth and assets survey 2012 to 2014 (user requested data)

Median total household wealth grew between 2010/12 and 2012/14 within most areas, with the largest increases occurring in London (14%), Scotland (13%) and the South East of England (11%). However, not all areas experienced increasing median wealth. Falls occurred in Yorkshire and the Humber (–8%), the West Midlands (–2%) and the East Midlands (–1%) (ONS, 2015). The falls in Yorkshire and the Humber were driven by falls in financial wealth, property wealth and physical wealth.

The distribution of wealthy households is not even across English regions, Scotland and Wales. Figure 12 shows the concentration of millionaire households (based on total household wealth) – enough wealth to be in the wealthiest 10% of households. The greatest concentration of wealthy households is in the South East of England (22%), followed by London (18%), and the lowest concentration of very wealthy households is in the North East of England (2%), followed by Wales (4%).

Figure 12: Percentage of wealthy households by region – Great Britain, 2012–14



Source: ONS (2015) reproduced from Compendium: Main results from the Wealth and Assets Survey: July 2012 to June 2014, Figure 1.

Labour market inequality and in-work poverty

The main source of income for most households of working age is earnings from employment. Earnings also continue to influence the income of retired households through the relationship between lifetime earnings and pension income. As a result, inequality in the labour market is a key determinant of poverty and income inequality through the distribution of work and the distribution of earnings. In this section we examine trends in labour market inequality and the distribution of work across households.

The largest increase in earnings inequality occurred from the late 1970s to the mid- to late 1980s (see, for example, McKnight, 2000, Dickens, 2000; Dickens and McKnight, 2008 and Machin, 2011). In Table 5 we see that the increases in hourly earnings inequality were greatest in the top half of the earnings distribution (90/50) in all three periods assessed; except female full-time employees 1991–97 for whom the increase in the 50/10 ratio was greater than the increase in the 90/50 ratio. In the period 1977–83, increases in hourly earnings inequality were much greater for male employees than for female employees, but in the two later periods (1984–90 and 1991–97) increases were greater among female employees. In fact, for female full-time employees, hourly earnings inequality increased by a greater amount between 1984 and 1990 than 1977–83. Although changes in weekly hours of work affect the relationship between hourly earnings inequality and weekly earnings inequality, trends in hourly and weekly earnings inequality are very similar (the greatest difference is found among female workers due to changes in the share of part-time employees and in the number of hours worked).

Table 5: Change in hourly earnings inequality – 1977–83, 1984–90, 1991–97 (percentage change)

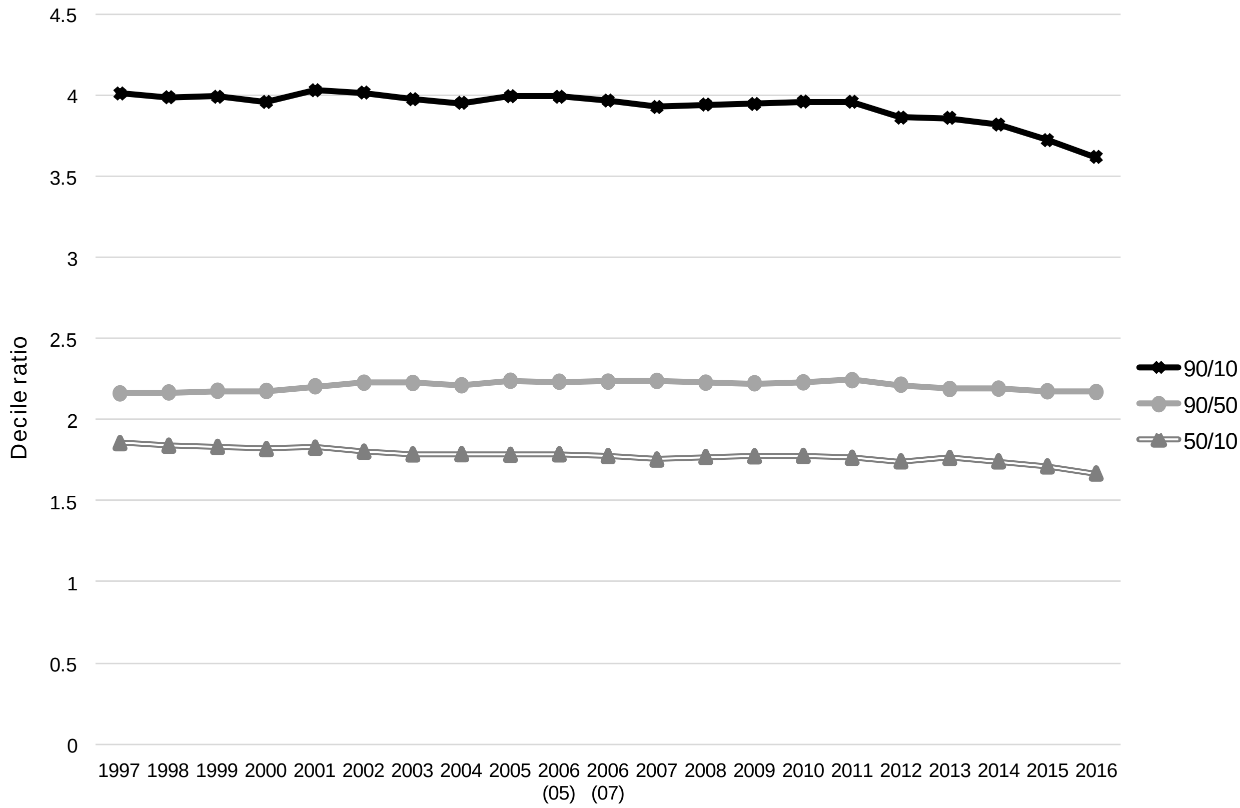
		1997–1983	1984–1990	1991–1997
All employees	90/10	16.2	9.2	7.3
	90/50	9.3	5.6	3.9
	50/10	6.3	3.4	3.3
Male full-time employees	90/10	17.2	13.0	5.9
	90/50	9.1	7.0	3.3
	50/10	7.4	5.6	2.5
Female full-time employees	90/10	9.0	14.2	7.2
	90/50	6.3	7.8	2.1
	50/10	2.5	6.0	5.0
Female part-time employees	90/10	7.3	17.2	16.8
	90/50	12.9	9.8	8.7
	50/10	-4.9	6.8	7.4

Source: McKnight (2000; Table 5.1) New Earnings Survey Panel Dataset

The estimates in Table 5 are computed from earnings data drawn from the New Earnings Survey Panel Dataset (NESPD) which has since been replaced by the Annual Survey of Hours and Earnings (ASHE). Many regard ASHE as the most reliable source of information on employee earnings for the UK; it has better coverage of both lower paid and higher paid employees than the NESPD. There are some breaks in the time series due to changes in classifications and methodology, but we have a fairly consistent series from 1997 which we can use to measure changes in earnings inequality.

In Figure 13 changes in hourly earnings inequality between 1997 and 2016 are measured in terms of decile ratios among all employees. This shows that an employee at the 90th percentile of the ranked wage distribution earned around four times more than an employee at the 10th percentile and this ratio remained fairly stable between 1997 and 2011. Since 2011 this ratio has been falling, down to 3.6 in 2016, and an examination of the dispersion in the bottom (50/10 ratio) and the top (90/50) halves of the wage distribution suggest that this is mainly driven by compression in the lower half of the distribution. This means that wage growth has been stronger for the lowest paid employees (or at least that wages have fallen least). This is likely to have been helped by the minimum wage creating a wage floor over a period marked by limited wage growth and cuts in real and absolute wages (McKnight and Gardener, 2015). Over this period there were only very modest increases in the minimum wage. We will have to wait and see if the National Living Wage, which has led to greater increases in minimum rates since October 2016, leads to further compression of the wage distribution.

Figure 13: Trends in gross hourly earnings inequality 1997–2016

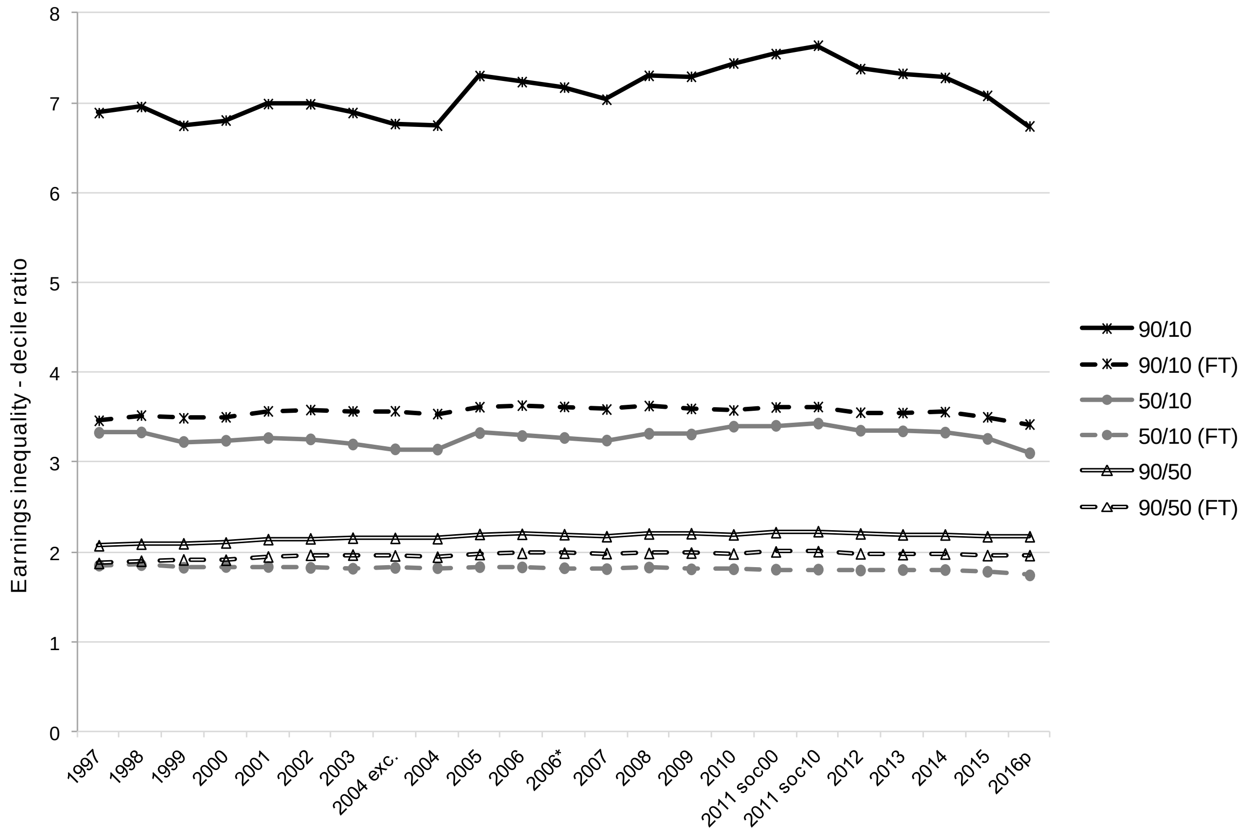


Source: Annual Survey of Hours and Earnings (ASHE), ONS data release - various years

Notes: (1) There are three breaks in the series. In 2004 ASHE replaced the New Earnings Survey (NES) and for 2004 earnings data are made available using NES (2004 exc.) and ASHE methodology (2004). Further methodological changes were made in 2006 with data made available using the old (2006) and new methodology (2006*). In 2011 earnings data was coded using SOC2010 but as this has very little impact on inequality measures we only show 2011 data using the new classification (2011soc10). 2016 data are provisional (2016). (2) Hourly pay of employees on adult rates whose pay for the survey pay-period was not affected by absence.

Examining inequality in weekly or monthly earnings allows us to assess the extent to which variation in hours of work affect the distribution of earnings from work. Figure 14 shows earnings inequality trends using various decile ratios for gross weekly earnings from 1997 to 2016 for all employees and separately for full-time employees. Increases in earnings inequality over this period are much less dramatic than during the 1980s. The increases in gross weekly earnings inequality between 2007 and 2011 have been driven by changes in part-time working as similar increases are not observed among full-time employees. Inequality for all employees and full-time employees is closest for the 90/50 ratio reflecting the fact that most employees earning above the median are working full-time. Similar to recent trends in wage inequality, weekly earnings inequality has fallen. This appears to reflect falls in inequality in the bottom half of the distribution, falling wage inequality and increases in hours of work.

Figure 14: Trends in gross weekly earnings inequality for all employees and full-time (FT) employees – 1997–2016



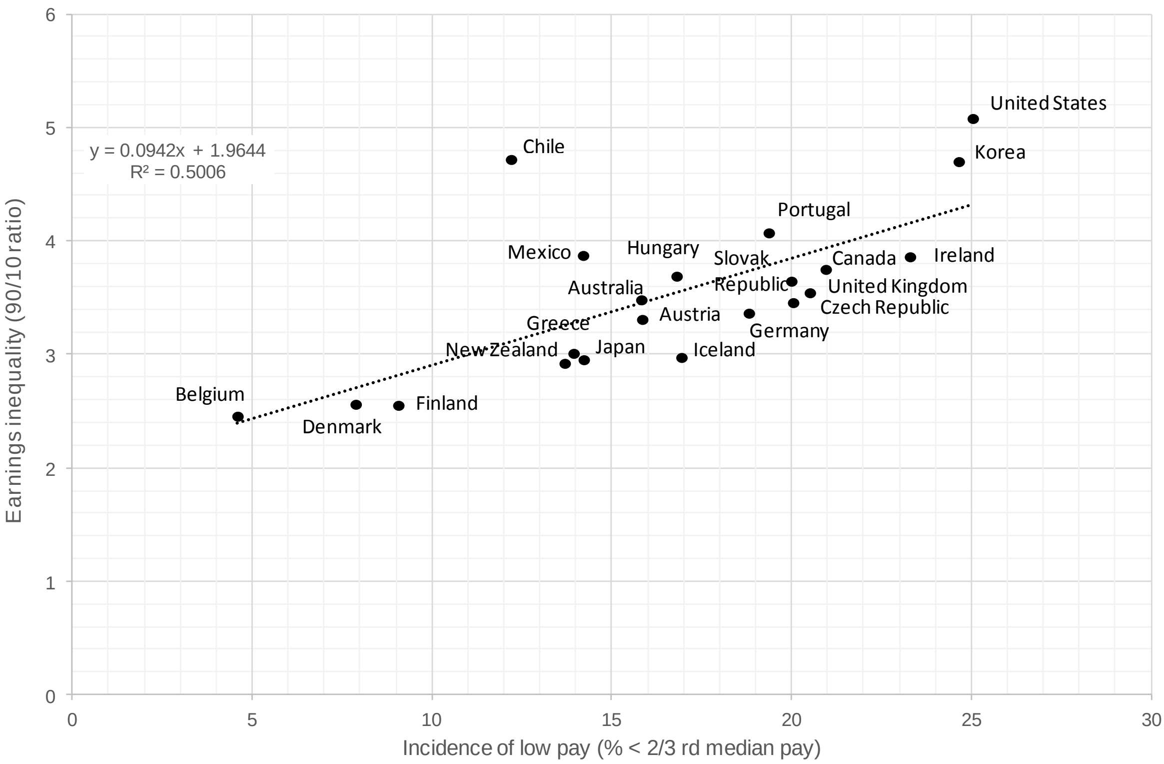
Source: ONS Annual Survey for Hours and Earnings (2016)

Notes: See Figure 13, note (1).

One of the remarkable features of the recent economic downturn was the fall in real wages. This occurred across the wage distribution with significant shares of workers, including those continuously employed, receiving nominal as well as real wage cuts (McKnight, 2015a; McKnight and Gardiner, 2015). Younger workers experienced some of the greatest falls in wages and younger age groups have average earnings below those achieved by earlier cohorts at the same age (ONS, 2014).

Previous research has highlighted the cross-country relationship between earnings inequality and the incidence of low wage employment (Lucifora *et al*., 2005). The US, for example, is characterised by a relatively high level of earnings inequality and a relatively large share of employees who are low paid (Figure 15). The UK is also a country with relatively high earnings inequality and relatively high low-pay incidence. Countries such as Belgium, have relatively low earnings inequality and a low incidence of low-wage employment.

Figure 15: Cross-country relationship between earnings inequality and low pay incidence (2013)



Source: McKnight *et al*. (2016a; Figure 1.4) OECD.Stat

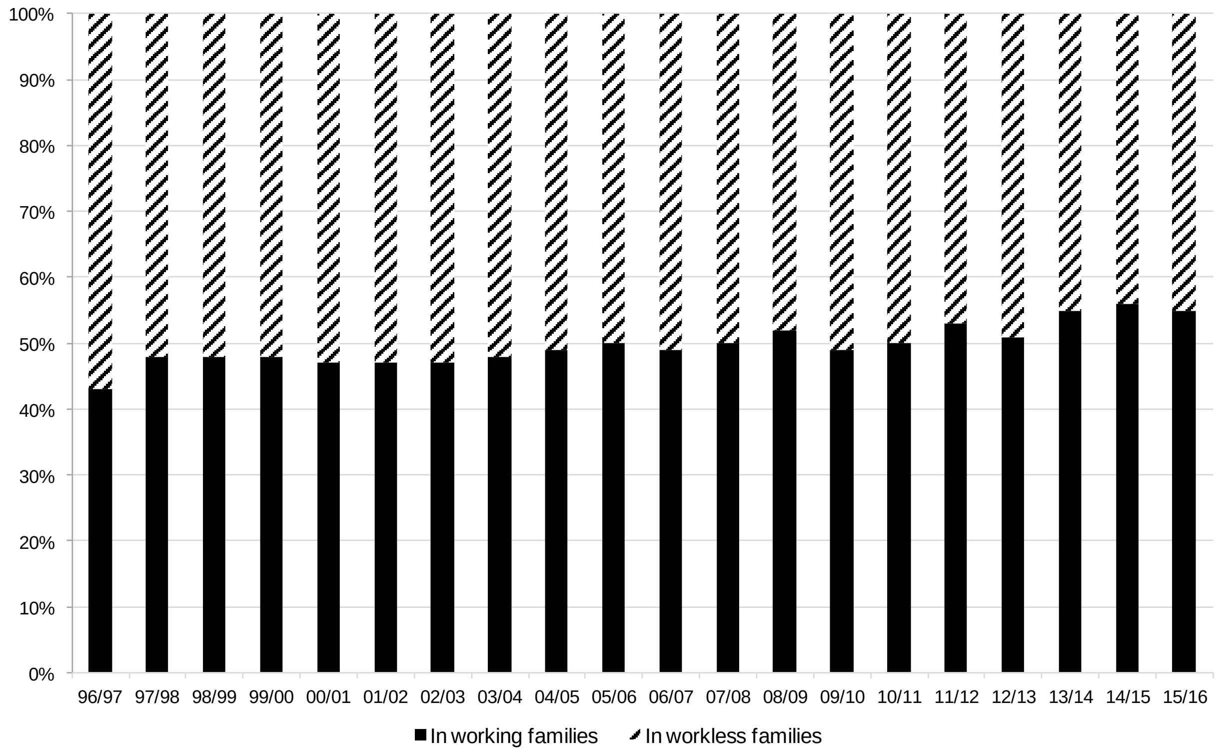
Trends in the incidence of low-wage employment are similar to those observed for earnings inequality, with large increases from the late 1970s to the mid-1990s. Over the last 20 years the incidence of low pay in the UK has been relatively stable at around one in five employees earning less than the low-pay threshold of two-thirds median pay (Corlett and Gardiner, 2015; Figure 1). The introduction of the UK National Minimum Wage in 1999 was very effective at reducing extreme low pay but not the overall incidence of low pay in Britain (Bain *et al*., 2014). There is some evidence that the minimum wage helped to reduce earnings inequality in the lower half of the earnings distribution (see McKnight, Stewart, Himmelweit and Palillo (2016) for a review of this literature). Due to the level at which the minimum wage has been set, the distribution of minimum wage workers across households and the interaction between minimum wages and the tax and benefit system, the minimum wage is likely to have had very little, if any, direct effect on income poverty and income inequality. It was suggested that proposed cuts to the Working Tax Credit (cash transfer paid to workers living in low-income households) would be offset by increases in the minimum wage, but this was strongly opposed, as analysis revealed that minimum-wage workers tend to be fairly evenly distributed across the income distribution while, in contrast, tax credit recipients are concentrated at the bottom of the distribution (tax credit eligibility is means tested). Cuts to tax credits were opposed in the House of Lords and eventually abandoned by the government, but had the reform taken place, the result would have been to make low-income households worse-off overall (Browne, 2015; D'Arcy *et al.,* 2015). The UK government has since halted the planned changes to existing in-work benefits, but there will be cuts to in-work benefits in the near future (when Universal Credit replaces Tax Credits).

Working status of households

A number of recent studies have highlighted the fact that work no longer protects households from poverty in the way that it used to and in-work poverty rates have increased. In recent years more than half of all working age adults classified as living in relative income poverty are living in working households. Figure 16 shows the trends in the working status of households for working age adults living in relative income poverty where income is measured before-housing costs are deducted. Trends for the after-housing costs measure of income are similar; although the share of working age adults living in relative income poverty who are living in working households has been greater than 50% since 2004/05 for the after-housing costs measure. This is not the same as saying that the risk of poverty is greater among individuals living in working households compared with those living in non-working households, although sometimes these two concepts are confused. Figure 17 shows the much higher risk of poverty for individuals living in workless households compared with those living in working households.

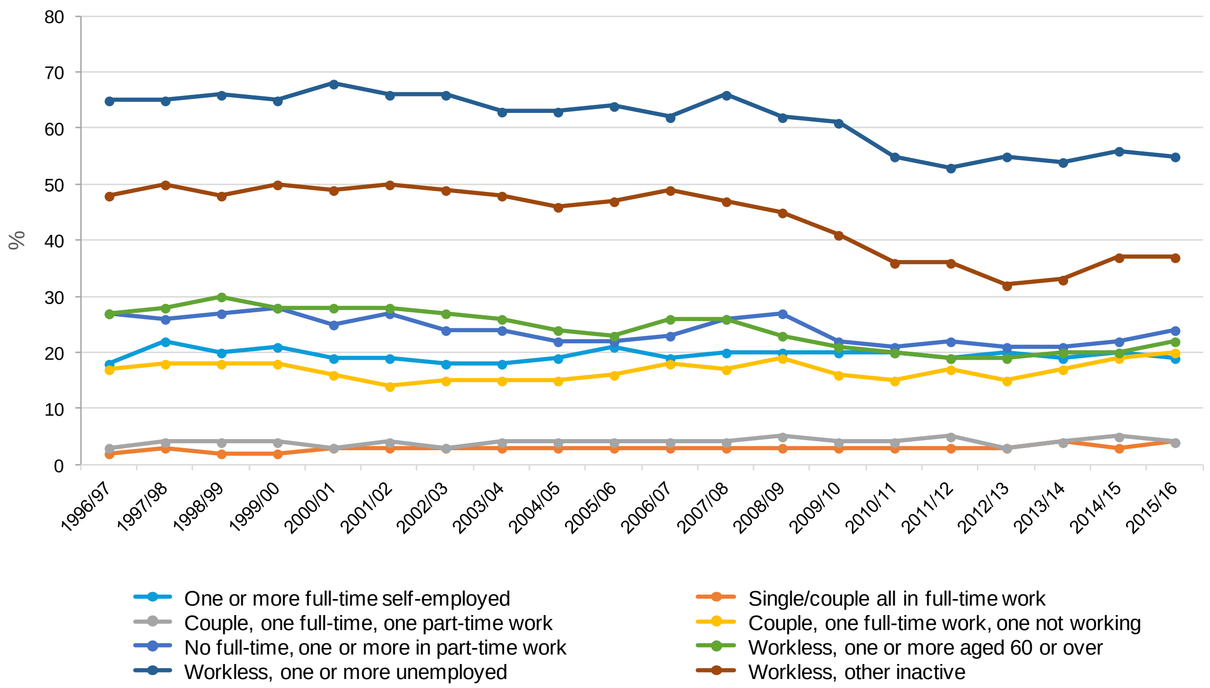
The greater share of poor working age adults living in working households is driven by falls in workless households as employment rates increased and reflects the fact that earnings from employment are often not sufficient to lift a household out of poverty due to low pay or hours of work. This is combined with the fact that in-work benefits are not sufficiently generous to lift these households out of poverty. MacInnes *et al.* (2015) show that while around 3 million people in in-work poverty in 2013/14 are in families in which one adult was working and one was not, 1.7 million were in families in which all adults were working full-time (this includes single parent families).

Figure 16: Economic status of households for working age adults living in relative income poverty – before-housing costs



Source: DWP (2017); Households below average income: 1994/95 to 2015/16

Figure 17: Share of individuals living in relative income poverty by household status



Source: DWP (2017); Households below average income: 1994/95 to 2015/16

5 INEQUALITY AND POVERTY WITHIN AND BETWEEN POPULATION SUB-GROUPS

So far we have focused on overall levels of economic inequality and poverty for the UK as a whole and for constituent countries/regions of the UK. However, there is a considerable body of work examining economic inequality between and within different population sub-groups. While it is not the purpose of this review to document detailed trends by population sub-groups or to examine the relationship between economic inequality and the incidence of poverty within population sub-groups, in this section we review two key bodies of work in this area and summarise findings in relation to gender, age, disability and ethnicity.

The Equality and Human Rights Commission (EHRC) is a statutory non-departmental public body established by the Equality Act 2006 to safeguard and enforce the laws that protect the British people's rights to fairness, dignity and respect. The EHRC replaced the Commission for Racial Equality (CRE), the Disability Rights Commission (DRC) and the Equal Opportunities Commission (EOC), as well as taking on responsibility for protecting and promoting equality and human rights for everyone living in Britain. Some responsibilities are devolved and therefore EHRC established a Commission in Scotland and a Commission in Wales; Northern Ireland has its own equality legislation. Here we focus on EHRC's work in relation to equality.

The Commission's work on equality is shaped by the Equality Act 2010, which is a legal framework to protect the rights of individuals and advance equality of opportunity for all. The Equality Act 2010 protects against discrimination for a set of characteristics: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. These are often referred to as protected characteristics. EHRC has a legal duty to monitor and evaluate progress towards equality and the protection and promotion of human rights. The Equality Measurement Framework (EMF) was developed to assist the Commission fulfil its legal duty (see Burchardt and Vizard (2011) for the theoretical development of the EMF, and EHRC's website for supporting evidence[16]). The core of the framework is a detailed list of central and valuable freedoms or capabilities across ten dimensions or domains. Periodically, the EHRC publishes an assessment, along with supporting evidence in a series of reports. In 2010, the EHRC produced its first progress report on equality, entitled *How Fair is Britain?* This was followed in 2016 by: Is *Britain Fairer? The state of equality and human rights 2015*; *Is England Fairer?*; *Is Scotland Fairer?*; *Is Wales Fairer?*[17]

There are clear overlaps between the Commission's work on reducing inequality between groups and the interests of those seeking to reduce poverty. In 2009, the Equality and Human Rights Commission in Scotland commissioned research to explore the relationship between poverty and equality, to help the Commission assess whether it could play a valuable role in poverty work given its equality mandate (Jarvis and Gardner, 2009). As described above, the Commission's approach to equality is somewhat different from the wider concept of income inequality, as its focus is on equality between defined groups of individuals identified in the Equality Act 2010 – so-called protected characteristics. Within the Equality Measurement Framework (EMF) there exists a link between equality and poverty, as 'standard of living' is included as one of the domains of life in which equality is measured. The researchers consulted equality and poverty experts and key organisations working in these two areas. On the basis of these consultations, the research found that equality analysis was a useful tool for understanding some of the reasons that people fall into poverty and the different reasons why they remain poor, giving some insight into how to break entrenched cycles of deprivation. The conclusion they reached was that using equality as a lens to analyse poverty could help to develop more effective policies that both prevent people falling into poverty and help lift people out of poverty. However, there was some concern that the equality approach had the potential to artificially split low income individuals into different groups, with some left in a low priority group (i.e., those without protected characteristics).

Reducing inequality between population sub-groups, particularly in the domain of standard of living, may help to reduce relative income poverty rates, but it is clearly possible for poverty rates to remain high even when, for example, poverty rates between age groups are equal. This highlights the need for an anti-poverty strategy to coexist with an equality strategy.

The second major body of work takes a slightly different approach to that of the EHRC by examining the relationships between inequalities in people's economic outcomes and their characteristics, not just between population sub-groups but also within sub-groups. The focus is on a narrower set of outcomes, economic inequalities, but often measures continuous variable outcomes rather than the binary outcomes used by the EMF. The National Equality Panel (NEP) was set up by the Labour government in 2008 and its report *An Anatomy of Economic Inequality in the UK: Report of the National Equality Panel* (Hills *et al.*, 2010) provides an extensive, detailed assessment of inequality within population sub-groups in the UK. NEP analysis provides empirical examination of how inequalities in outcomes (for example, education, earnings, income and wealth) are related to individuals' characteristics and circumstances (for example, gender, age and ethnicity). The analysis has been updated on a number of occasions (see Hills *et al.*, 2015; Hills *et al.*, 2016), and the EHRC commissioned an 'NEP style report' for Wales (Davies *et al.*, 2011).

Here we summarise the most recent evidence on economic inequality and poverty for some of the population sub-groups with protected characteristics. This evidence is drawn from Hills *et al.* (2015); Hills *et al.* (2016) and EHRC (2016).

5.1 GENDER

- Women in England, Scotland and Wales are less likely to be employed than men. The employment gap narrowed after 2008–13 due to falling employment rates among men as a result of the economic downturn. Overall, men are more likely to be unemployed than women but women are more likely to be economically inactive.
- Women are still less likely to be employed in senior positions. In 2013, in England, Scotland and Wales men were twice as likely as women to be in managerial, director or senior official occupations.
- Women are more likely to work part-time than men and are more likely to work in low-paid jobs.
- Between 2008 and 2013, average hourly pay for men declined by more than for women, and this led to a narrowing of the gender pay gap. However, a significant pay gap remains.
- Gender pay gaps widen with age.

5.2 AGE

- Age employment gaps widened between 2008 and 2013. Young people were the least likely to be employed and the most likely to be unemployed.
- Young people experienced significant reductions in average hourly pay between 2008 and 2013.
- Young people and parents with dependent children are the most vulnerable to unstable and low-paid work.
- Young people are the most likely to be living in poverty. Poverty rates fell by most for older people.

5.3 DISABILITY

- Disabled people have much higher unemployment rates than non-disabled people (11.1% and 6.4% in 2013). The gap in unemployment rates has widened since 2008.
- Disabled people are underrepresented in senior positions in the labour market.
- On average, disabled people earn less than non-disabled people.

5.4 ETHNICITY

- Some ethnic minority groups are less likely to be in employment. Pakistani and Bangladeshi women have the lowest employment rates.
- Some ethnic minority groups are underrepresented in senior positions in the labour market.
- Unemployment rates vary for different ethnic minorities, but all have unemployment rates higher than White people.
- Higher average rates of poverty are found among people from ethnic minorities, but there is a mixed picture, with variation across ethnic groups.

6 EMPIRICAL RELATIONSHIP BETWEEN INCOME INEQUALITY AND INCOME POVERTY

This review has explored a number of different measures of economic inequality and poverty. In this section we focus on estimating the empirical relationship between relative income poverty and income equality. A focus is necessary to keep the task within the limited scale of this project but other research conducted in CASE is exploring relationships between other measures of inequality and poverty.

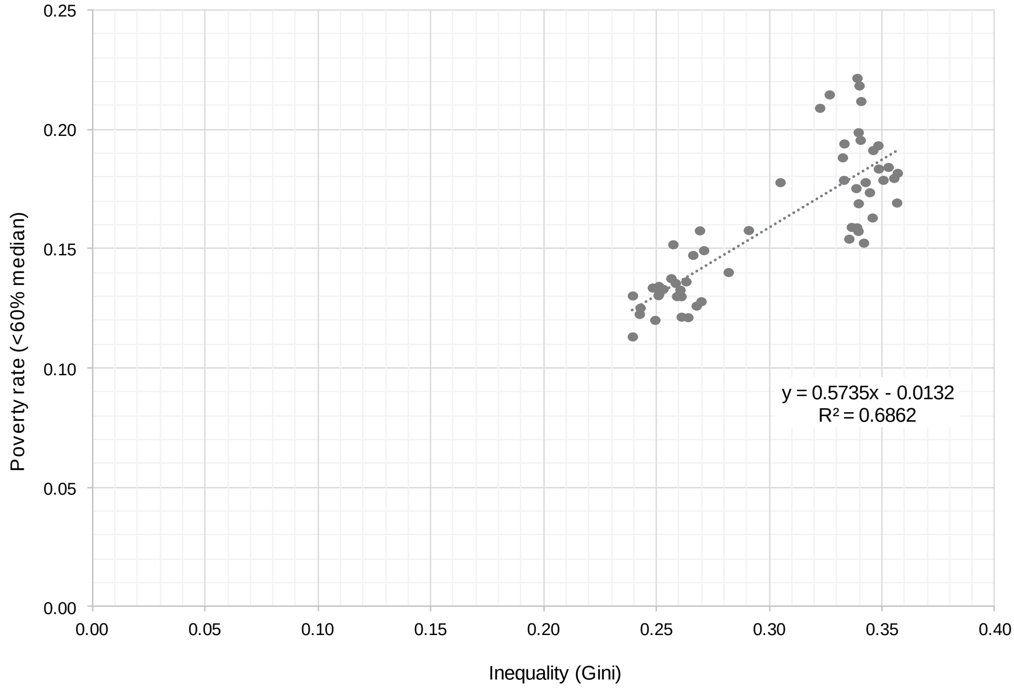
Key points

- A clear positive empirical relationship is found between income inequality and relative income poverty.
- Focusing on the Gini coefficient as a measure of income inequality, we show that, on average over the period 1961–2015/16 for the before-housing costs measure of income, an increase in the Gini coefficient of 1 point is associated with an increase in the rate of relative income poverty by 0.6 percentage points.
- For the after-housing costs measure of income, an increase in the Gini coefficient of 1 point is associated with an increase in the rate of relative income poverty by 0.7 percentage points.
- When we examine the relationship between poverty and inequality in the top and bottom halves of the income distribution we find that, as we would expect, poverty has a stronger correlation with inequality in the bottom half of the distribution for the before-housing costs measure of income.
- However, for the after-housing costs measure of income we find that there is a stronger correlation between poverty and inequality in the top half of the income distribution than in the bottom half of the distribution.
- We even find a positive correlation between poverty and inequality at the very top of the income distribution, measured by the share of income received by the top 1%.

Although Atkinson notes that, in general, societies with low levels of relative income poverty tend to be those characterised by low levels of income inequality (Atkinson, 2015), there are cases in which trends in inequality and poverty have diverged (Tóth, 2014; Forster and Vleminckx, 2004). The OECD also finds that 'countries with a wider distribution of income also have higher relative income poverty, with only a few exceptions' (OECD, 2008, p.17). The literature on poverty and the development of anti-poverty policies have tended to evolve in parallel to those on inequality. There are a few exceptions (see for example, Béteille, 2003; Adams, 2002), but there is a tendency for these studies to focus on middle- or low-income countries rather than rich and middle-income countries like the UK. Here we explore the empirical relationship between relative income poverty and income inequality in the UK. In the review of the literature in Section 7 we dig deeper to seek to understand what drives any observed relationship between inequality and poverty.

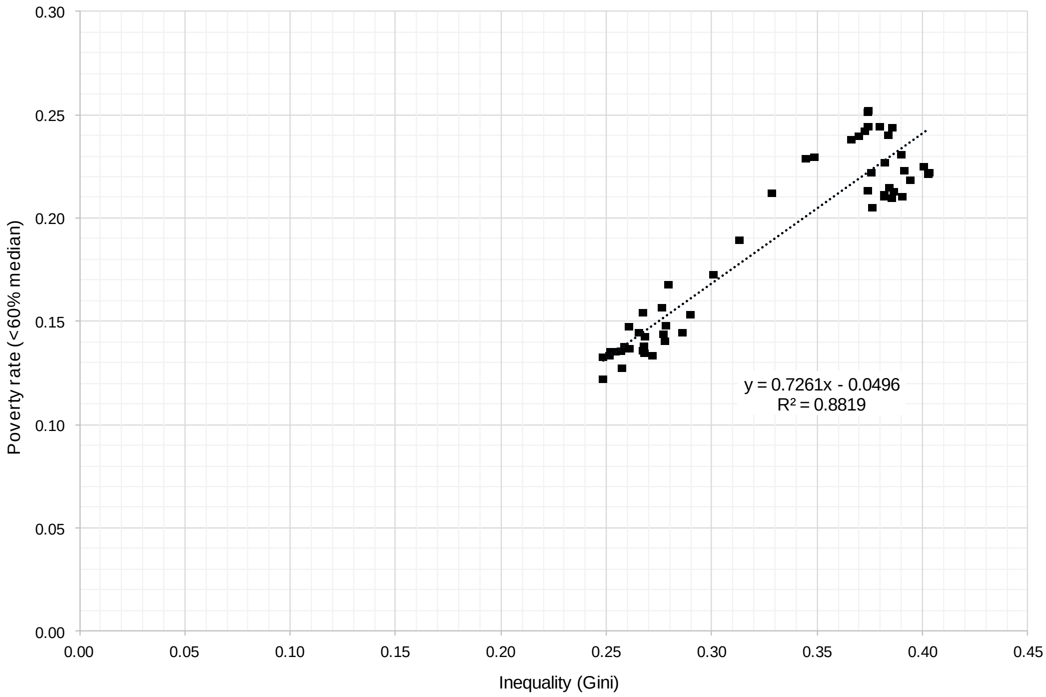
In the following three charts we plot the empirical relationship between inequality and relative income poverty. The first (Figure 18) shows the relationship between relative income poverty and income inequality measured by the Gini coefficient using a before-housing costs measure of income over the period 1961–2015/16. We observe a positive relationship between inequality and poverty – an increase in the Gini coefficient of 1 point is associated with an increase in the rate of poverty of 0.6 percentage points. This appears to be mainly determined by two clusters of lower and then higher income inequality and poverty rates. Where inequality rates are higher, there appears to be a greater dispersion in poverty rates. Figure 19 shows the after-housing costs measures, for which there is a steeper gradient mapping the relationship between income inequality and relative income poverty – an increase in the Gini coefficient of 1 point is associated with an increase in the rate of poverty of 0.7 percentage points. There is a higher correlation between the two series (evident from visual inspection and shown by the larger coefficient estimate and the higher R^2).

Figure 18: Relationship between relative income poverty and income inequality (Gini coefficient) – before-housing costs measure of income (1961–2015/16)



Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.
Notes: See Figure 2 notes.

Figure 19: Relationship between relative income poverty and income inequality (Gini coefficient) – after-housing costs measure of income (1961–2015/16)

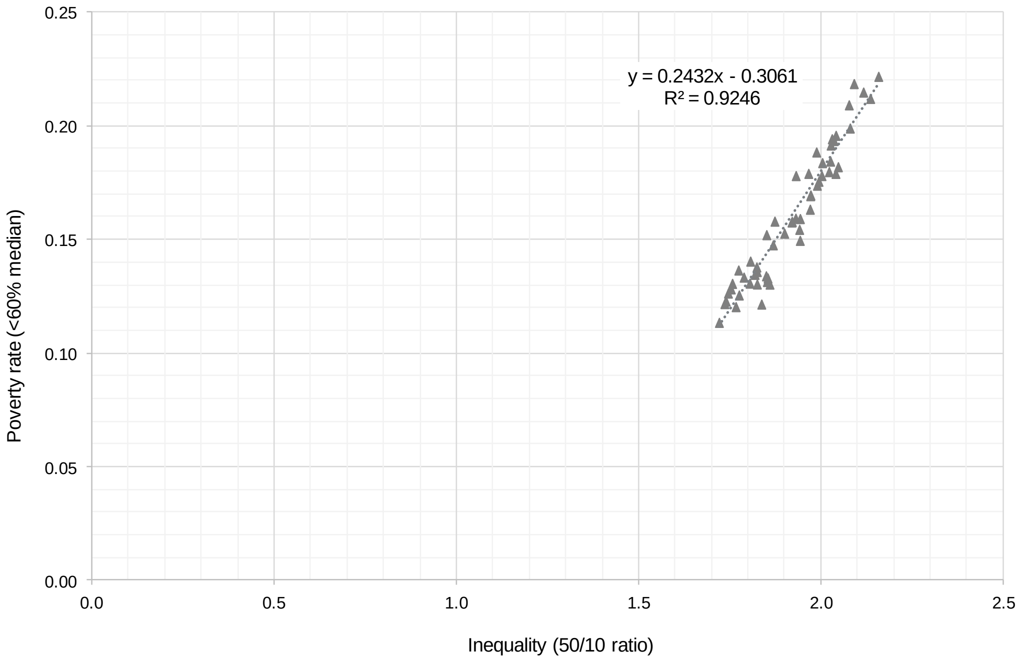


Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.
Notes: See Figure 2 notes.

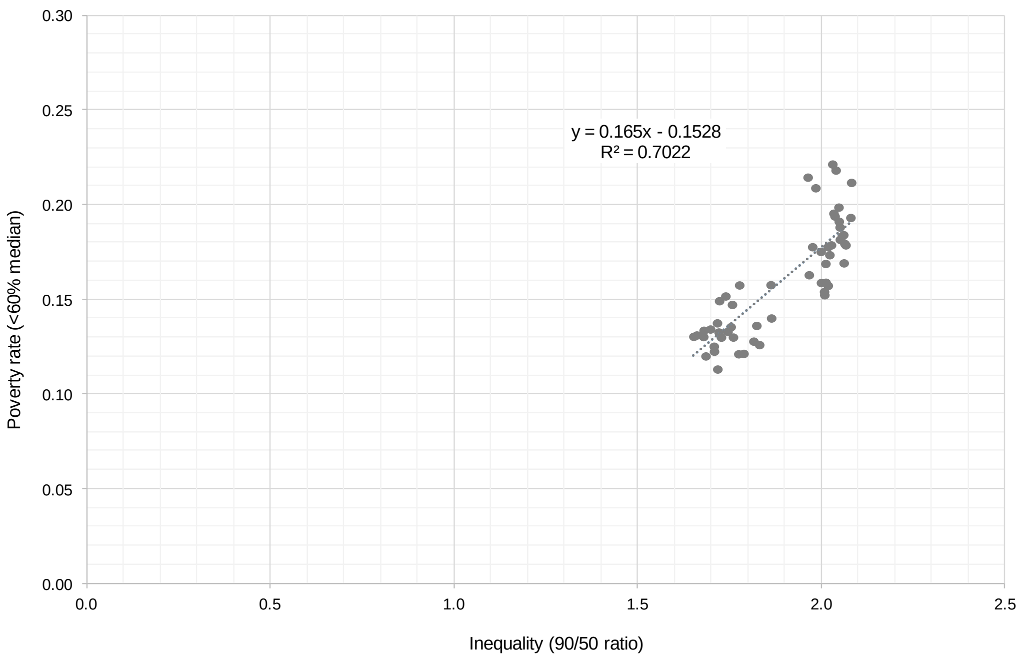
As we noted in Section 3.2, in a purely mechanical sense we would expect greater inequality in the lower half of the income distribution to have a higher correlation with relative income poverty rates than inequality in the upper half of the distribution. We have examined these relationships for before-housing costs income measures (Figure 20 a/b) and for after-housing costs income measures (Figure 21 a/b). For the before-housing cost measure we observe a stronger positive relationship between poverty rates and inequality in the lower half of the income distribution (50/10 ratio) than for inequality in the top half (90/50 ratio). However, for the after-housing costs measure we observe a stronger positive relationship between poverty rates and inequality in the top half of the income distribution than for inequality in the lower half. This suggests the presence of mechanisms behind the relationship we observe between inequality and poverty.

Figure 20: Relationship between relative income poverty and income inequality (decile ratios) – before-housing costs (1961–2015/16)

a) Inequality 50/10 ratio



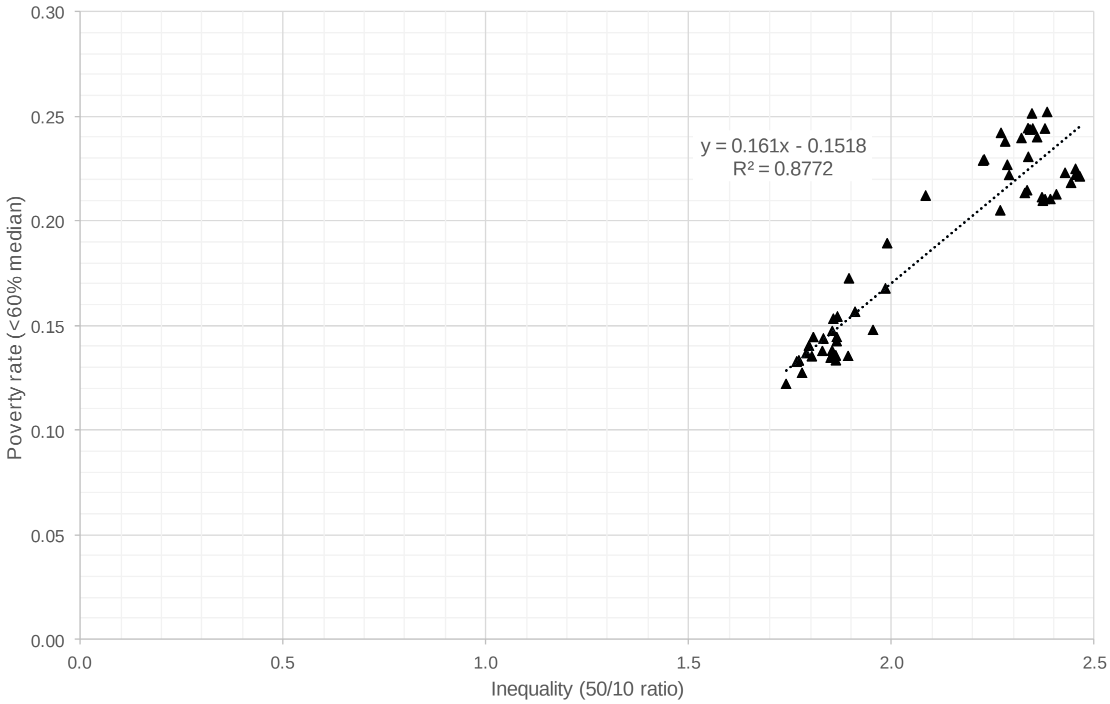
b) Inequality 90/50 ratio



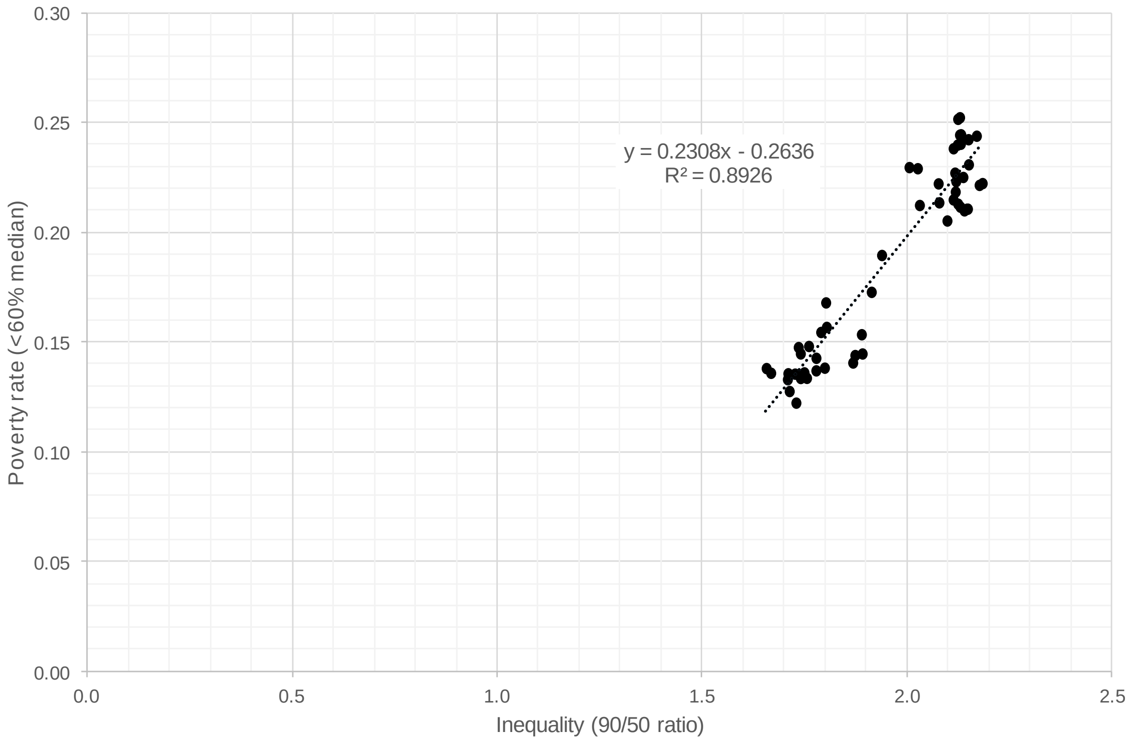
Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.
Notes: See Figure 2 notes.

Figure 21: Relationship between relative income poverty and income inequality (decile ratios) – after-housing costs (1961–2015/16)

a) Inequality 50/10 ratio



b) Inequality 90/50 ratio

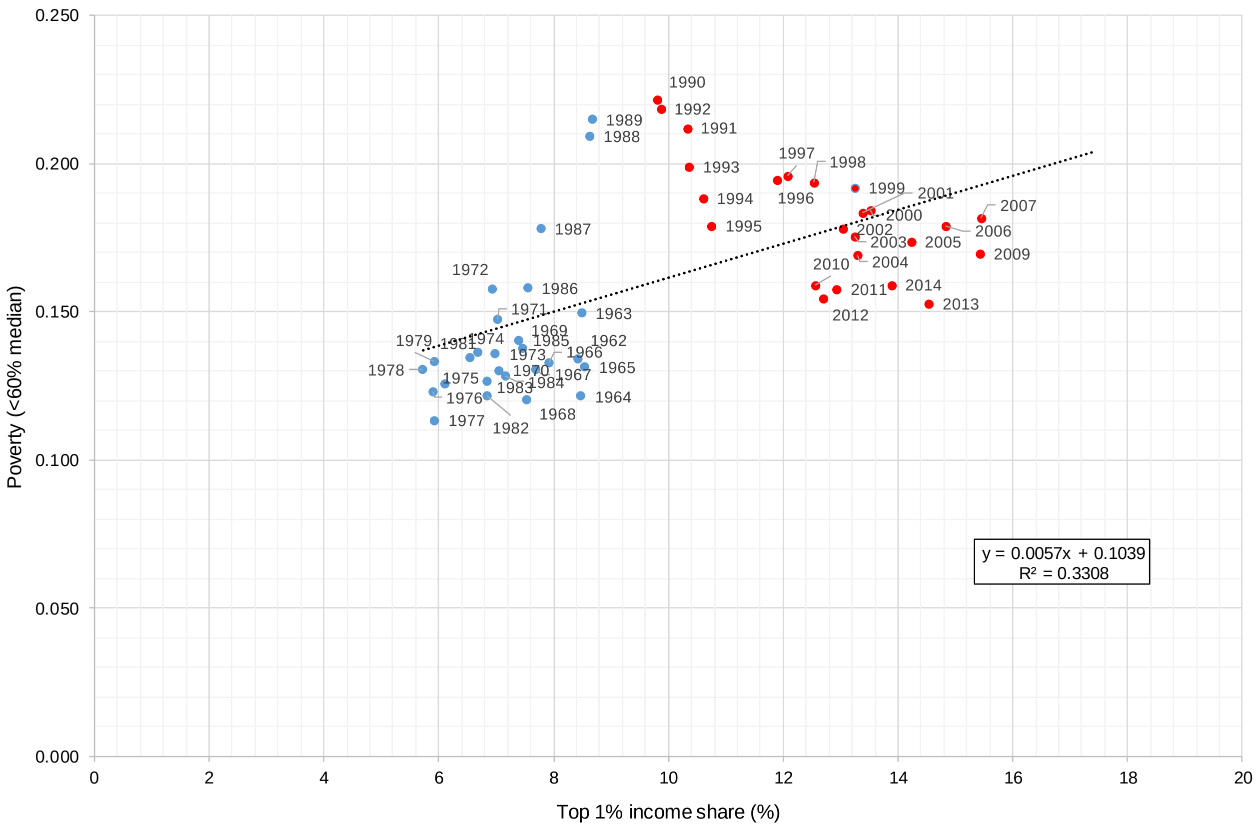


Source: Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017.

Notes: See Figure 2 notes.

Figure 22 shows the relationship between income inequality measured by the share of income received by the top 1% and relative income poverty over the period 1962–2014/15. We are only able to examine before-housing costs measures as the income inequality series is not available for income measured after-housing costs. The data points coloured red (bold) indicate the income inequality series from 1990 to show the break in this series which moves from household to individual fiscal units. We observe a positive correlation between the share of income received by the top 1% and the relative income poverty rate. However, there are two main clusters (lower concentration in income and lower relative income poverty/higher concentration in income and higher relative income poverty) 'joined' by the period in the 1990s when relative income poverty rates fell but the top 1% income shares continued to increase. There are also breaks in the top income shares data series which means that this series is not measured on a consistent basis over this entire period, so some caution should be applied in interpreting the relationship shown in Figure 22.

Figure 22: Relationship between relative income poverty and income inequality (top 1% income share) – before-housing costs measure of income (1962–2014/15)



Source: Poverty series, Institute for Fiscal Studies: Living Standards, Inequality and Poverty Spreadsheet 2017; Top income share series, The World Wealth and Income Database.

Notes: See Figure 2 notes for poverty series. See Figure 7 notes for top 1% income share series.

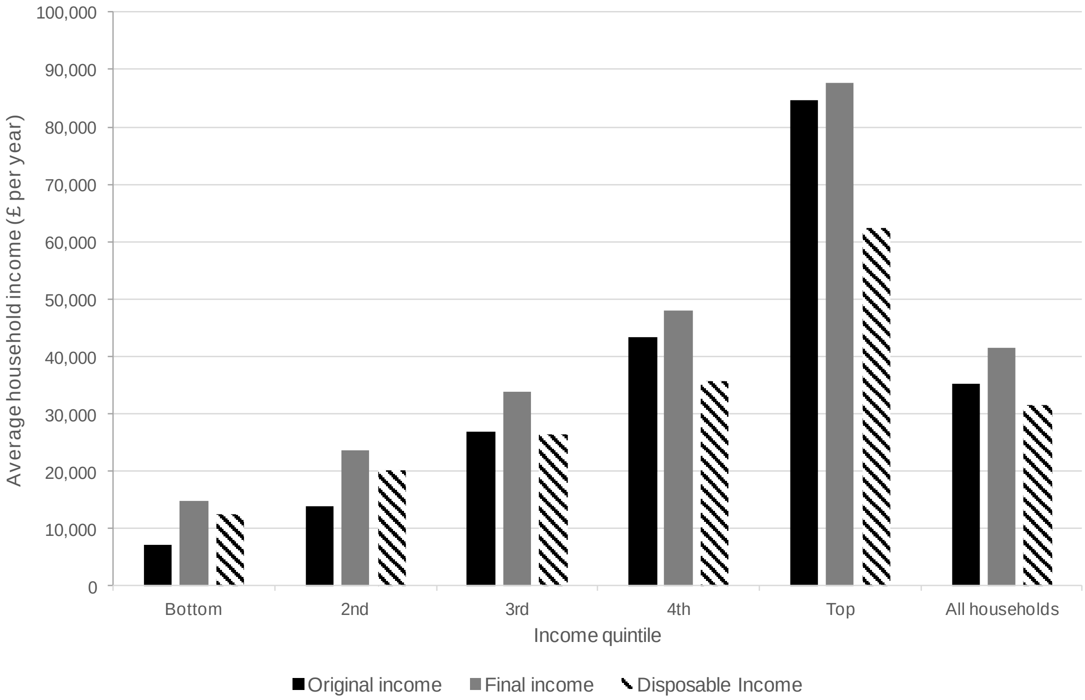
7 WHAT DRIVES THE RELATIONSHIP BETWEEN INEQUALITY AND POVERTY? A REVIEW OF A SELECTION OF POTENTIAL MECHANISMS

What evidence is there that high levels of economic inequality hinder efforts to address poverty? This section reviews aspects of the literature, examining why economic inequality may be linked to poverty through a selection of different mechanisms. These mechanisms may help to explain why high economic inequality could hinder efforts to address poverty. It is not possible to review all of the potential mechanisms that may link poverty to inequality within the scope of this project but as part of a larger research programme being conducted within CASE we are reviewing evidence on a number of other dimensions. This evidence will be published during 2017.

7.1 SCALE OF REDISTRIBUTION REQUIRED WHEN INEQUALITY IS HIGH

In general, where economic inequality is high, a greater amount of redistribution is required to reduce poverty if poverty reduction is achieved through redistribution via the tax and cash transfer system, or by funding policies targeted at 'pre-distribution'[18]. Where inequality is high, opposition to increased taxation and a more progressive tax system could prove to be too politically unpopular for governments given the scale of redistribution required.

Figure 23: Original, final (gross) and disposable income by quintile groups and across all households, 2015/16



Source: ONS (2017) Statistical bulletin: Household disposable income and inequality: financial year ending 2016. How taxes and benefits redistribute income between various groups of households in the UK. Figure 4.

Figure 23 shows the effect of cash transfers and direct taxes on household income within of different income quintiles and the overall distribution of income in 2015/16. This figure shows how cash transfers increase average incomes in all income quintiles (shown by the difference between original and final incomes) but particularly among lower income households. Direct taxes reduce average incomes in all income quintiles but particularly in higher income households. This demonstrates the progressive nature of the UK tax and benefit regime.

As you would expect, average incomes are reduced by a greater amount due to direct taxation than they are increased by cash transfers because tax revenues are used for more purposes than to finance cash transfers. Some of these expenditures are important in defining the shape of the initial (original) distribution of income.

Targeted or means-tested cash transfers are thought by some to be the solution to poverty reduction within a relatively low direct taxation regime, but recent evidence suggests that greater concentration of net cash transfers is not more effective at poverty reduction than systems with a stronger universal element (McKnight, 2015b). This may be due to the greater support for the welfare state in more universal systems, which allows them to be more generous than in highly means-tested systems, which become leaner over time. It may also be influenced by 'poverty traps'[19] created within highly means-tested systems that make it difficult to escape from poverty or 'near poverty'.[20] Stigma may also play a role by reducing take-up rates in means-tested benefits relative to universal benefits. See McKnight, Duque and Rucci (2016) for a recent review of this literature.

Alternative approaches target factors which give rise to unequal distributions of market income such as reducing educational inequalities, investing in early childhood development and reducing labour supply constraints, particularly for women (for example, childcare). Some refer to this as 'pre-distribution' (strong advocates include the US economist James Heckman[21]) and in the long term have the potential to be highly effective and reduce the need for large-scale redistribution. However, high inequality poses a number of additional challenges to this approach.

Parents do what they can to secure a good future for their children and therefore it is not surprising that a strong link exists between family income and children's outcomes. Where economic inequality is high the state has to do more to level the playing field. This may be in terms of access to a high quality education, access to higher education and access to professions. This becomes a 'race' between wealthy families seeking to protect the advantages that their families enjoy and the state seeking to increase equality of opportunity. In highly unequal societies many families may have more resources (financial and otherwise) to assist their children than the state has to assist low-income children, placing limits on the extent to which the state can reduce educational inequalities (McKnight, forthcoming) and fund a successful 'pre-distribution' strategy.

7.2 CAUSES OF HIGH ECONOMIC INEQUALITY

Understanding the cause or causes of high or rising economic inequality is important for designing the most effective policy response. One of the main explanations for rising wage inequality is a demand shift in favour of high-skilled workers, which has driven up wages relative to low-skilled workers. Two of the main drivers identified in the literature are globalisation and skill-biased technological change. Globalisation can lead to a fall in the relative wages of low-skilled workers as a result of fierce competition from lower paid low-skilled workers in lower income countries in the form of cheap imports of goods and services. In contrast, globalisation can increase the demand for relatively scarce high-skilled workers through an increase in demand for the goods and services they produce as a result of access to a larger market. If technological change is biased in favour of high-skilled workers it can reduce the demand for low-skilled workers. This can occur where it is cheaper to automate the work of low-skilled workers relative to the cost of their labour. Technological change can increase the demand for high-skilled workers both in terms of the demand for their skills to develop advanced technologies and for the operation of these technologies. If either of these phenomena are the main driver behind increasing inequality then a clear policy response is to increase the relative number of skilled workers to reduce the wage premium.

An alternative explanation for rising wage inequality is that there has been a shift in the balance of power between different groups of workers. There is evidence in many countries that labour market institutions (e.g. unions) have weakened and this has led to a deterioration in the negotiating power of low-skilled workers. There is also evidence that a change in the balance of power has affected the ability for some groups of workers to command very high salaries and bonuses. Here the most effective policy response is to build effective labour market institutions or redress power imbalances between workers through regulation, breaking down barriers to high paying jobs and, if necessary, higher taxation to recuperate the excess 'rents' higher paid workers with unequal power are able to extract.

We have already touched on the role of the labour market and labour market inequalities, and the three main explanations for increasing wage inequality (globalisation, skill-biased technological change and weakening of labour market institutions) discussed in the literature. All of these explanations trace a weakening position of low-skilled workers relative to higher skilled workers. We have shown that both earnings inequality and the incidence of low-wage employment increased most dramatically over the period that income inequality and income poverty increased (mainly the 1980s). Earnings from employment provide the main income for most working age adults; the ability of parents to earn a decent income from employment helps to protect children from poverty and allows people to save an adequate income for retirement. However, although addressing inequalities in the labour market is likely to be a key policy response which needs to be explored further, the mapping from individual earnings to family income is not simple. This is due to the distribution of work across households, the distribution of low-paid and high-paid workers across households and the role of unearned income, including cash transfers.

7.3 PUBLIC OPINION AND SHIFTS IN CULTURAL AND SOCIAL NORMS

Public opinion and social norms regarding economic inequality are important in terms of redistributive preferences and, therefore, the pressure put on governments to reduce inequality. A number of different strands of the literature outline how this mechanism shapes the relationship between inequality and poverty and we review key parts of this literature here.

Key points

- Standard models predict that an increase in inequality will lead to an increase in demand for redistribution by the electorate, and as a result inequality will fall; but the empirical evidence is mixed. A recent study for the UK found that the demand for redistribution in the UK did not increase and pressure was not put on the government to redistribute more, and offers some explanations for this (Georgiadis and Manning, 2012).
- The vast majority of Britons consider that income inequality is too high. A smaller share believe that government should redistribute income from the well-off to the less well-off, but this does not mean that they do not believe that government should seek to reduce inequality through other policies.
- Evidence shows that people underestimate the level of inequality and overestimate the level of social mobility. This is important because there is a positive (negative) correlation between people's perceived level of inequality (social mobility) and the demand for redistribution.
- Inequality has remained high in the UK and a number of factors seem to have played a contributory role: an underestimate of the real level of inequality by the electorate; New Labour's 'somewhat ambiguous' position regarding inequality and a focus on equality of opportunity not outcome; growing average incomes and employment; and a change in

preferences and beliefs leading to a fall in the demand for redistribution (in particular, attitudes about the disincentives to work associated with the welfare state).

- A clear policy pointer is that any organisation seeking to tackle poverty should focus on informing the UK electorate of the true level of inequality in the UK so that they can reach an informed decision on whether or not the government should do more to reduce inequality.

Standard political economy models predict that an increase in inequality should bring about an increase in redistribution in democracies, but empirical research testing this prediction is not conclusive (see discussion and review of the literature in Georgiadis and Manning, 2012).

Meltzer and Richard (1981) outline a theoretical model linking inequality with the demand for redistribution and mechanisms that translate redistributive preferences to policy actions via the political system. This has become known as the Meltzer-Richard model, and the study by Tóth, Horn and Medgyesi (2014) adds to the existing literature that has sought to test some of the predictions of this model. They note that although the Meltzer-Richard model assumes that current income alone shapes individuals' redistributive preferences (through self-interest, higher income individuals are less in favour of redistribution than those on a lower income), there is evidence that a number of other individual characteristics are related to redistributive preferences. The first of these is expectations. Individuals with the prospect of upward mobility will prefer less redistribution and individuals expecting their income position to worsen will prefer more redistribution. This may be shaped by individuals' personal prospects but also more broadly by perceptions of social mobility. The second is the role of social context and social values. People may hold egalitarian attitudes or oppose redistribution based on conditioning and socialisation. These attitudes can be further influenced by personal experiences. The final is referred to as the 'failure attribution argument'. In this case, redistributive preferences are influenced by beliefs for why individuals are poor (or rich). Beliefs that individuals are poor because they are idle or lazy and others are rich because they work hard and make sacrifices are associated with less support for redistribution than when luck (good and bad) is believed to play a significant role.

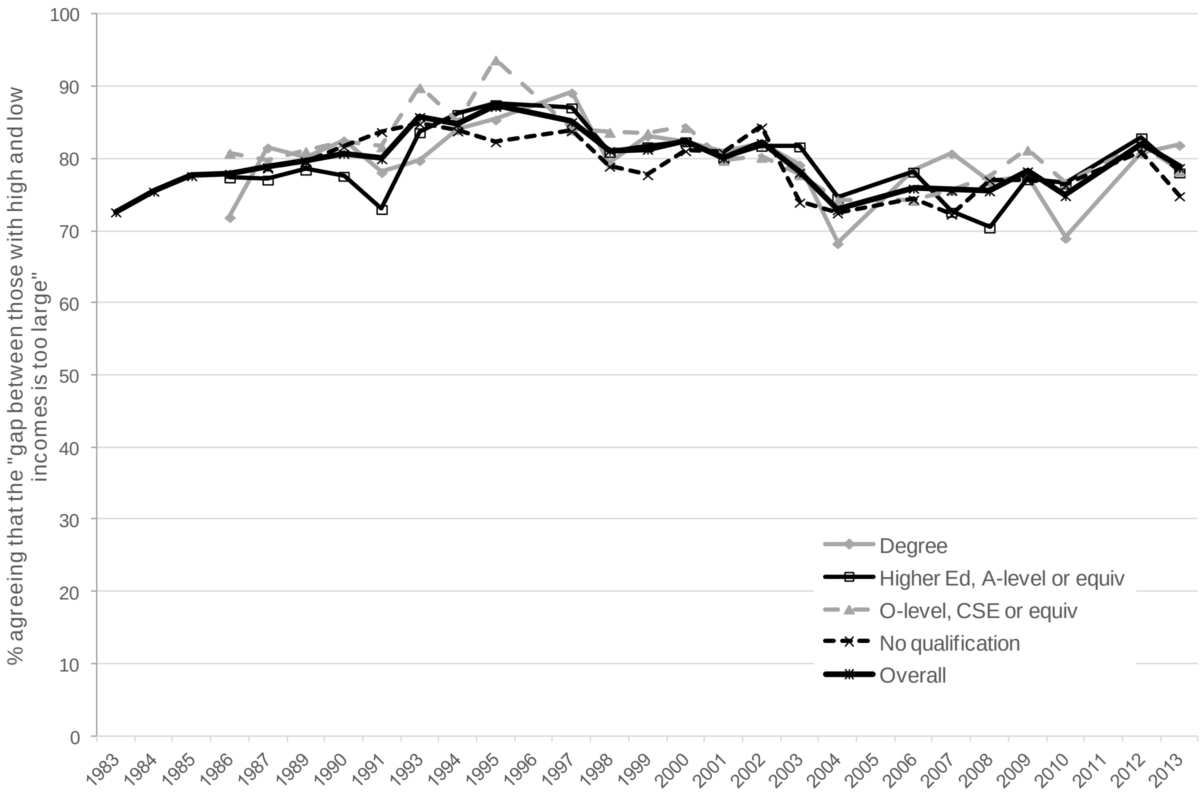
Over long periods of time, higher inequality can become an accepted 'norm', and this can lessen support for reducing inequality; although there may continue to be stronger support for reducing some types of poverty, such as pensioner poverty and child poverty. These cultural norms can be shaped by perceptions of merit and 'justification' for high income and wealth, and these views can coexist with narratives blaming those living on a low income on assumed laziness and idleness. A review conducted in 2007 concluded that there was a 'shortage of knowledge regarding how people interpret and understand issues relating to inequality, poverty and redistribution' (Orton and Rowlingson, 2007). In this section of the review we examine the evidence on public attitudes to inequality and poverty and assess how any shifts in social norms may limit the extent to which society (i.e. the electorate) puts pressure on government to reduce poverty and inequality.

Figure 23 shows that the majority of Britons agree that the gap between those with high and low incomes is too large and that there is little variation in this view between education groups. The share of the population agreeing that inequality is too high increased most over the 1980s when the greatest increases in inequality occurred (73% to 81%) and continued to increase further, peaking at 87% in 1995, but declined to 73% by 2004 even though there was very little change in income inequality (measured by the 90/10 ratio) over this period. This may indicate that the UK population had become slightly more tolerant of the higher level of inequality, or at least desensitised to the higher level of inequality, but this was a period of rising average incomes and employment, and this may have played an important role.

Another factor that may be important is the then Labour government's 'somewhat ambiguous' position regarding inequality (Orton and Rowlingson, 2007). New Labour was sending out signals that it was not concerned about inequality in terms of concentrations of income and wealth, but that it was deeply concerned about increasing child poverty. In 1998 Peter Mandelson, New Labour's chief strategist, was famously quoted as saying that: '*We are* *intensely relaxed about people getting filthy rich as long as they pay their taxes.*' Similarly, in the 2001 Election Campaign Tony Blair stated that '*The justice for me is concentrated on lifting incomes of those that don't have a decent income. It's not my burning ambition to make sure that David Beckham earns less money'.* In 1999, the then Prime Minister Tony Blair made a commitment to halve child poverty by 2010, and eliminate it altogether by 2020. New Labour's approach was to find policies that raised the incomes at the lower end of the distribution (effectively compressing the lower half of the income distribution) while ignoring changes in the top half of the distribution. However, throughout its time in office, Labour was clear that it believed that work was the best route out of poverty, and there was very little emphasis on redistribution. 'Work for those who can, security for those who cannot' was Labour's line behind its welfare reform agenda, but it also included a major re-evaluation of who was deemed capable of work (the 'who can's'), particularly in relation to lone parents and disabled people. These reforms continued under the 2010–15 Coalition government and the current Conservative government.

The share of the population agreeing that income inequality is too high increased following the financial crisis and over the subsequent economic recession, from 76% in 2007 to 82% in 2012 (Figure 24). In 2013, the most recent observation, the share had fallen a little to 79%. This dislike of inequality is not exclusive to the UK population (see evidence from a 30-country study in Nolan *et al.*, 2014). The OECD cites evidence from a BBC poll conducted in February 2008 which found that around two-thirds of the population in 34 countries thought that 'the economic developments of the last few years have not been shared fairly' (OECD, 2008, p.15).[22]

Figure 24: Attitudes to income inequality



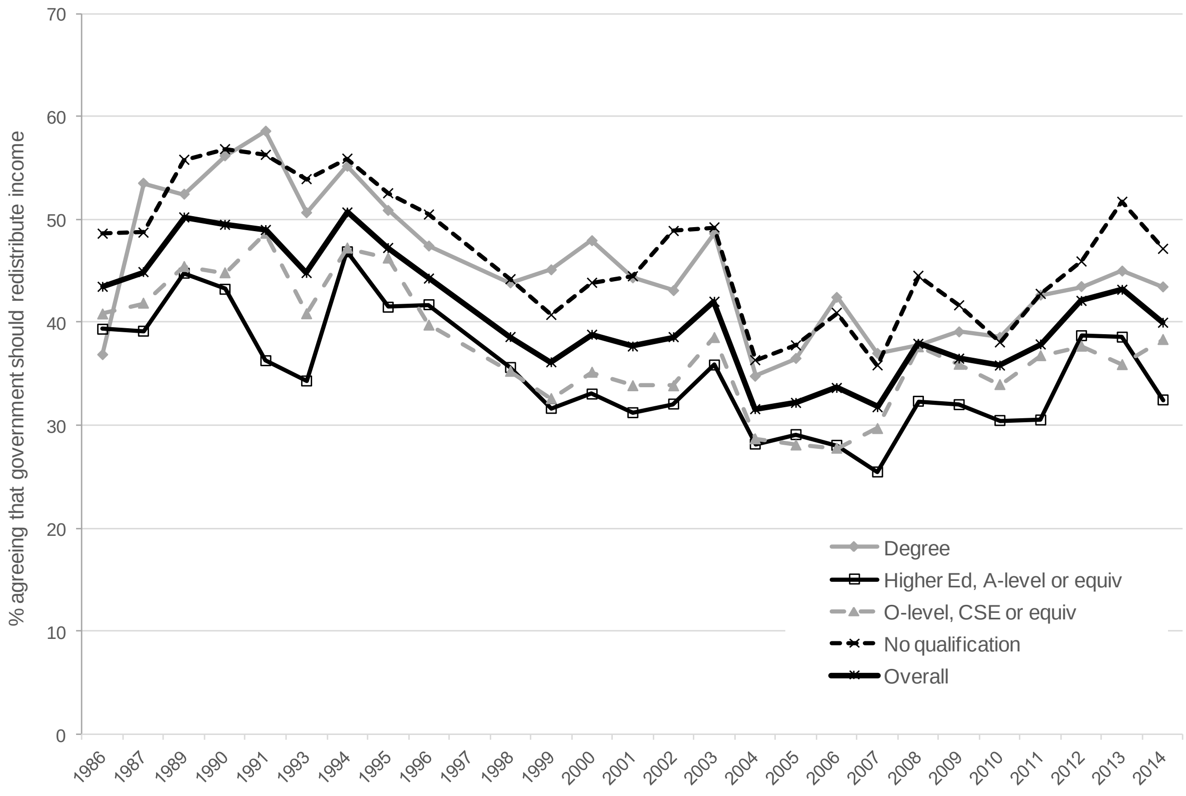
Source: McKnight and Tsang (2013) (GINI UK Country Report gini-research.org/CR-UK) (updated). British Social Attitudes Survey.

Social attitudes data have also been regularly collected in Britain asking respondents whether or not they agree that the government should redistribute income from the better-off to those who are less well-off (Figure 25). A greater share of people are found to agree that inequality is too high than agree that the government should redistribute income to reduce inequality. This is perhaps not unduly surprising given the range of other policy options available to governments that people may feel are preferable to simply redistributing income. In fact, perhaps it is more surprising that such a large share of people believe that this is what governments should do (around half of all people who believe that inequality is too high). We can also observe distinct trends in this series. The share agreeing that government should redistribute income increased from 43% in 1986 to 50% in 1989/90, which was a period of rapidly rising relative income poverty and income inequality (inequality (90/10) increased by 26%; top 1% share by 31%; poverty rate by 40% – see figures in Section 4 above). This finding is consistent with an analysis of the determinants of preferences for redistribution in 34 European countries over the period 2002–12, which found that changes in income inequality positively affect changes in preferences for redistribution (Olivera, 2015).

However, over the second half of the 1990s there was a fall in the share of Britons agreeing that government should redistribute income (50% in 1994 to 36% in 1999). This was a period over which relative income poverty and the dispersion of income barely changed (poverty rate increased by 2% and 90/10 by 1.8% – see figures in Section 4 above), although the top 1% income share continued rising rapidly (increased by 25%). This is suggestive of people becoming 'desensitised' to higher levels of inequality but may also have been affected by the fact that average incomes and employment rates were growing over this period as the UK recovered from the early 1990s recession. Another factor could be the then-Labour government's focus on addressing 'equality of opportunity' rather than 'equality of outcome'. This could have helped influence people's opinions about (a) whether inequality was too high and (b) what is the best policy response to tackling high inequality. Further falls are also observed in the early 2000s (2003–04) so that by the time the UK headed into the financial crisis in 2007, around 32% of people agreed that the government should redistribute income. However, as the financial crisis struck, this share rose dramatically to 38% one year later and further to 43% by 2013 as austerity measures hit, before falling back a bit in 2014 to 40%. Over this period, there was a considerable amount of high profile debate about the harmful effects of inequality, the role wealthy financial sector workers played in triggering the crisis and the price being paid by lower income families through cuts in public services and welfare. There was also much more open debate and criticism of the remuneration packages enjoyed by top executives and financial sector workers.

As well as plotting the average overall share of people who agree that government should redistribute income in Figure 24, we also include a breakdown by education groups. This shows that, broadly speaking, the education groups tend to follow the average overall trend; but what is interesting is that the groups most likely to benefit (individuals with no qualifications) and those most likely to contribute (individuals with degree-level qualifications) are consistently more in favour of the government redistributing income than the average. This finding for the UK is at odds with the predictions of the Meltzer-Richards model, since that model predicts that higher earners (here proxied by higher qualified individuals) are the least likely to favour redistribution. This suggests that, in the UK, factors other than self-interest are shaping highly qualified individuals' preferences for redistribution. As we saw in Figure 24, it is not the case that a greater share of this group believes that inequality is too high, so we can surmise that this is not driven by differences in perception.

Figure 25: Should government redistribute income?



Source: McKnight and Tsang (2013) (GINI UK Country Report gini-research.org/CR-UK) (updated). British Social Attitudes Survey (various years).

One of the conclusions of the 2007 review conducted by Orton and Rowlingson was that public attitudes to inequality should not be seen as fixed and that there is a potential for attitudes to change. However, the authors of that review didn't find any clear evidence explaining why attitudes change over time. Georgiadis and Manning (2012) found that increasing inequality did not lead to greater redistribution in the United Kingdom 1986–2004 (as standard models predict) and they estimate that this was due to preferences and beliefs changing quite rapidly over this period in a way that led to a fall in the demand for redistribution. The main change they found to be significant was a greater belief in the importance of incentives, as proxied by attitudes about the disincentives to work associated with the welfare state. Although Georgiadis and Manning are left unable to explain what led to this shift, they do note that it is consistent with political rhetoric at the time and a continuing programme of reforms in welfare to work programmes which included greater means-testing and conditionality in the form of activation.

A number of studies have shown that people's knowledge of inequality, the tax and benefit system, and redistribution is limited (see, for example, Orton and Rowlingson, 2007). Survey evidence shows that people consistently underestimate pay differences between different occupations and especially the pay of the highest earners (Osberg and Smeeding, 2006). The fact that they consider that even these underestimated pay differences are too large is taken as another indicator that people believe that inequality is too high. A short YouTube video explaining the differences between what Americans believe the distribution of wealth is, what they think it should be, and actual inequality in the US ('Wealth Inequality in America'[23]) has been viewed millions of time and received substantial media coverage. It also led to a similar video being made for the UK[24] highlighting the lack of knowledge about the distribution of wealth and how far the actual distribution is from the 'desired' distribution. A further video was made for the UK[25] in 2014 by the Centre for Economic Performance at the London School of Economics ('Inequality in the UK') which examined both income and wealth inequality in addition to changes in social mobility.

Why might this lack of knowledge be important? As we noted earlier, the Meltzer-Richards model predicts that when inequality is high, individuals desire more redistribution and put pressure on government to redistribute more. A recent study has shown that people are more in favour of redistribution when they *perceive* that inequality is high and that this relationship is much stronger than the relationship between support for redistribution and actual levels of income inequality (Niehues, 2014). There is also evidence that perceived levels of social mobility are linked to support for redistribution (Engelhardt and Wagener, 2014). A belief in the 'American Dream' and a misperception of actual, much lower, social mobility rates in the US may, in part, explain why Americans are less in favour of redistribution than Europeans. Another factor may be that Americans are more likely to perceive that they are in the middle of the income distribution than in other countries, even though inequality is higher in the US (Niehues, 2014). The implications are that if individuals underestimate inequality and overestimate social mobility then there is a lower preference for redistribution than would be the case if there was a more accurate perception of inequality and mobility. Evidence also shows that there are systematic biases in individuals' evaluations of their own relative position in the income distribution, and this too is important because individuals who overestimate their relative position believing that they are relatively richer than they are tend to demand higher levels of redistribution when informed of their true ranking (Cruces *et al.*, 2013).

In general, survey evidence shows that people believe that a certain level of inequality is desirable. The argument is often made that pay differentials are important to motivate and reward work effort and entrepreneurship, but there is clearly a limit to the degree of inequality people believe is necessary. Bromley (2003) examined evidence from the British Social Attitudes Survey in 1987, 1992 and 1999 (reproduced in Table 6). This showed that only a minority of people agreed that large differences in income are necessary for Britain's prosperity and the share that held this view fell from 26% in 1987 to 17% in 1999 (although there is no indication of what people mean by a 'large difference'). However, a majority of respondents agreed that inequality persists because it benefits the rich and powerful.

Table 6: Attitudes to inequality, 1987, 1992 and 1999

% agree	**1987**	**1992**	**1999**
Large differences in income are necessary for Britain's prosperity	26	19	17
Inequality persists because it benefits the rich and powerful	59	61	58
Base	1,212	1,066	804

Source: Bromley (2003, p.77)

The extent to which public policy follows or leads public opinion is a moot point. Hills analysed survey data on public opinion in the UK and examined New Labour's social security and related policies 1997–2001 in the light of evidence on public attitudes towards the policy choices involved (Hills, 2002). He found evidence that New Labour largely followed public opinion, which some may see as simply being led without trying to make a persuasive case for more radical change. Hills suggests that, in fact, it may demonstrate an approach that encompassed a progressive strategy which carried the public with it so that it could be sustained, in a way which would not have been possible if New Labour's approach had simply consisted of an increase in redistribution within the existing system.

7.4 SPATIAL ASPECTS OF INEQUALITY AND POVERTY

In this section we provide further evidence on the geography of inequality and poverty in the UK and examine how inequalities in public expenditure may be contributing to spatial inequalities.

Key points

- Research examining the geography of income, poverty and wealth has consistently shown an unequal distribution across the UK and recent research has documented an increasing concentration.
- The segregation of rich and poor can be important, as it can alter people's perceptions and affect their preferences for redistribution or other policy action designed to tackle poverty and inequality.
- We show that there are regional inequalities in individual average annual earnings and that these inequalities have widened since the end of the 1990s. This is driven by the fact that average annual earnings increased by more in England and Scotland than in Wales and Northern Ireland.
- Within England, annual average earnings have grown much more in London than in other English regions, leading to an increase in regional earnings inequality.
- Analysis of the geography of public expenditure shows considerable regional disparities both in terms of expenditure on services and infrastructure. Public expenditure on services appears to benefit residents in Northern Ireland and Scotland relative to residents in England and Wales.
- There also exist considerable differences in expenditure per head between English regions, with much lower rates in the South East and the East of England relative to London, the North East and the North West.
- Public infrastructure expenditure per resident has been found to be considerably higher in London and the North West than in the North East and the West Midlands. Higher expenditure in London has been suggested by some as a factor behind the much higher growth rates in London relative to other English regions since 2009.
- Greater freedoms to raise revenue and over local spending decisions realised by greater devolution may help to reduce poverty, but there is a danger that spatial inequalities increase as lower taxes are used to attract higher income households to an area, and areas with the highest rates of deprivation are the least able to raise much needed revenue.

The geography of inequality and poverty

One reason why the geography of inequality and poverty across the UK may be important is that segregation can influence people's perceptions. Where economic segregation occurs people may be more inclined to underestimate the true level of inequality and poverty. In this case, the rich do not directly observe the circumstances of the poor and do not feel as wealthy when surrounded by others enjoying the same level of wealth and privilege. For those living on a low income, poverty can be less keenly felt when they are surrounded by people managing on the same low income. Empathy can also be an issue; where the wealthy are segregated from lower income households this can limit the extent to which they feel inclined to understand the circumstances of individuals living in lower income households and support policies designed to improve their lives.

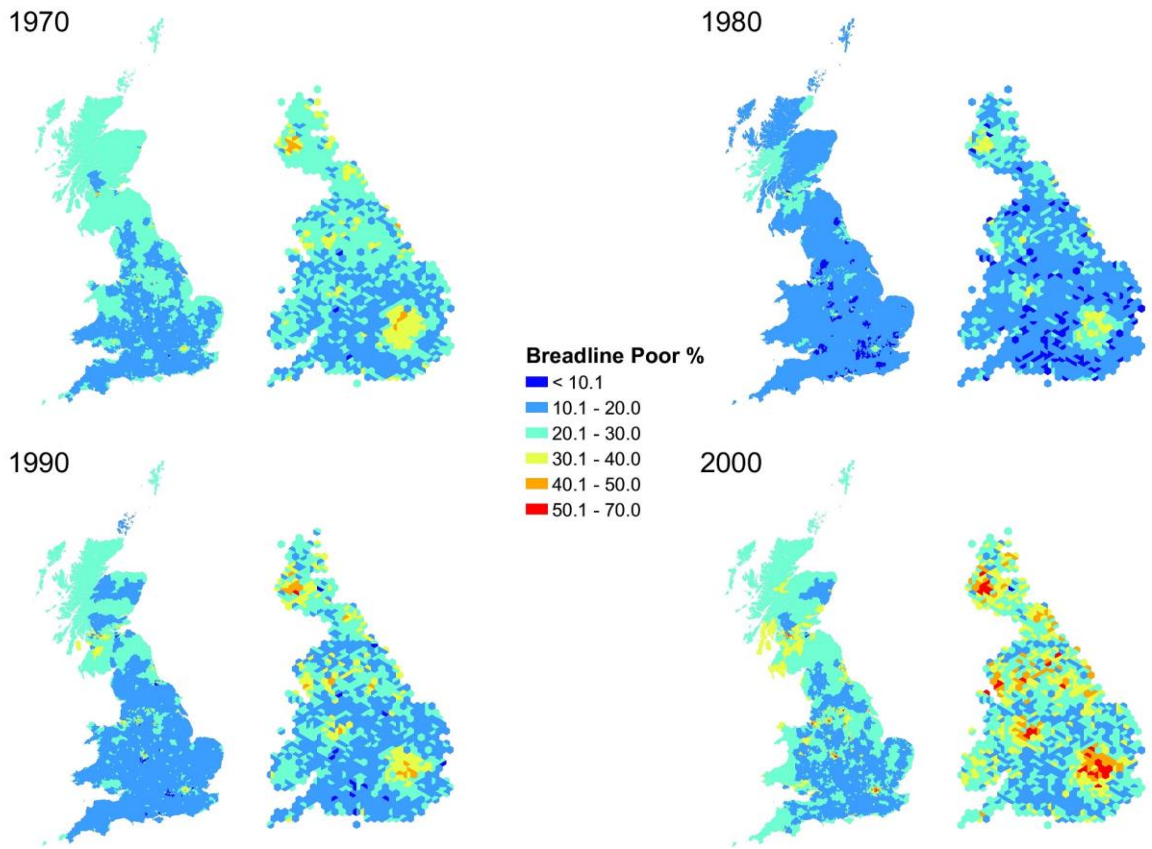
As we saw in Section 7.3, the perceived level of inequality and poverty is important because higher perceived levels of inequality are directly related to higher demand for government to redistribute income or more broadly to reduce inequality.

Mapping the geography of poverty has a long history in the UK, building on the pioneering work undertaken at the end of the nineteenth century and early twentieth century by Charles Booth

(*Life and Labour of the People of London*) and Seebohm Rowntree (*Poverty: A Study of Town Life*). More recently, a large study conducted for the Joseph Rowntree Foundation combined information on the changing geography of poverty, with new analysis on the changing geography of wealth (Dorling *et al.*, 2007). Combining information on poverty and wealth gives a clearer picture of the geography of inequality. Dorling *et al.*'s study shows that over the last 40 years or so there has been increasing polarisation, wherein rich and poor now live further apart. Poor and wealthy households have become more geographically clustered and segregated from the rest of society.

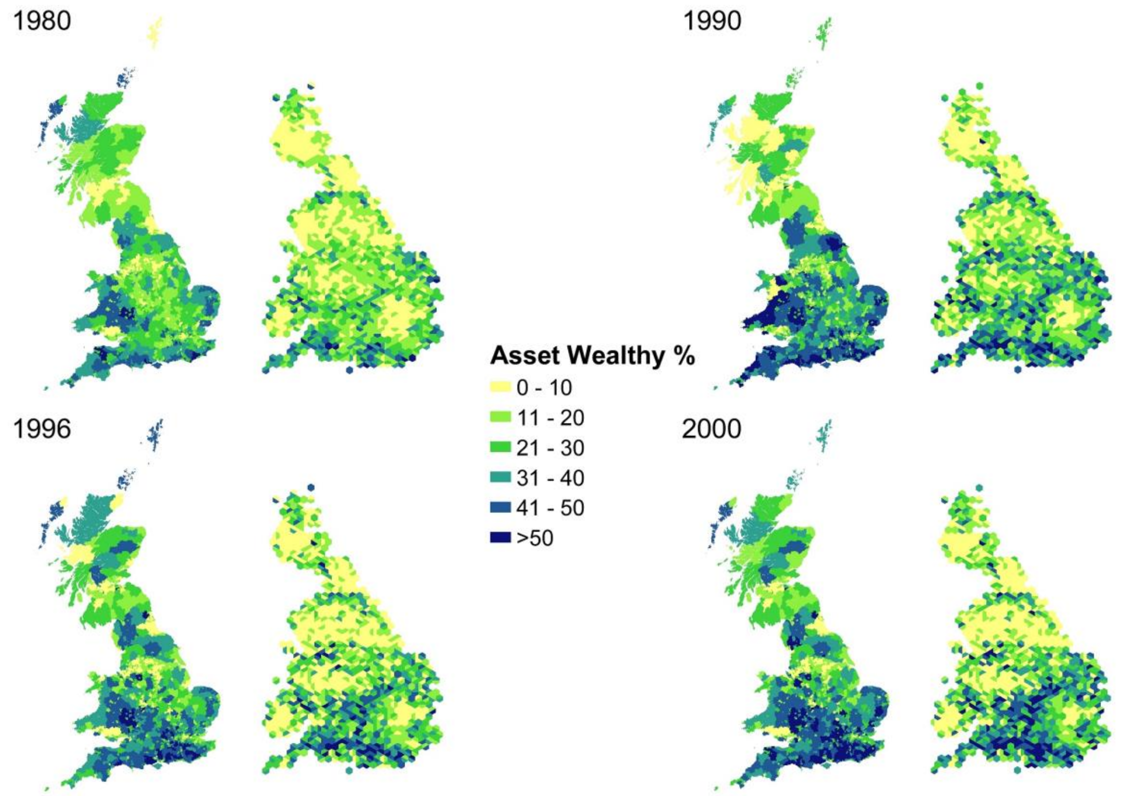
To show these findings graphically we reproduce two key figures presented in their report. Figure 26 shows the changing geography of poverty, where breadline poverty is defined as living below a relative poverty line (see Dorling *et al.*, 2007 pp. 10–11 for more details on how this is defined). For each point in time two maps are displayed. The map on the left of each pair is the traditional map which uses geographical boundaries to define spatial units. However, because the population is not evenly dispersed across the UK this map does not provide a clear picture of what is happening in urban areas where large concentrations of the population live, so within the map on the right each unit contains roughly the same sized population and thereby changes the shape of the map of the Britain to reflect population concentrations. As can clearly be seen from visual inspection of the maps, the ones on the right highlight the concentration of poverty within urban areas. The maps show the fall in poverty over the 1970s, followed by increases in poverty and the geographical concentration of poverty over the 1980s and 1990s.

Figure 26: The changing geography of 'breadline' poverty 1970–2000



Source: Dorling *et al.*, 2007: Map 1, p.19.

Figure 27: The changing geography of asset wealthy households 1980–2000



Source: Dorling *et al.*, 2007: Map 3, p. 23.

Figure 27 reproduces the maps showing the geography of asset wealthy households, where an asset wealthy household is defined as a household with sufficient total wealth for its estate to be liable to inheritance tax (see Dorling *et al.*, 2007 for more details). The maps show the increasing concentration of asset wealthy households and their changing geographical distribution, with increasing concentration of asset wealthy households in the south of England.

We saw in Section 4.1 that income poverty rates (before-housing costs) are higher in Wales and Northern Ireland than in England or Scotland. This gap has widened since the financial crisis but lower housing costs in Scotland for low-income households has meant that relative income poverty rates after-housing costs are lower in Scotland than in England and Wales.

Within English regions there is evidence of some convergence in before-housing costs measures of relative income poverty but higher housing costs in London have meant that a large gap in relative income poverty rates has emerged between London and other English regions.

This means that, despite higher average earnings observed in London (see below), relative income poverty rates after-housing costs remain higher than in other English regions or, on average, in Scotland, Wales and Northern Ireland.

Regional inequalities in average earnings

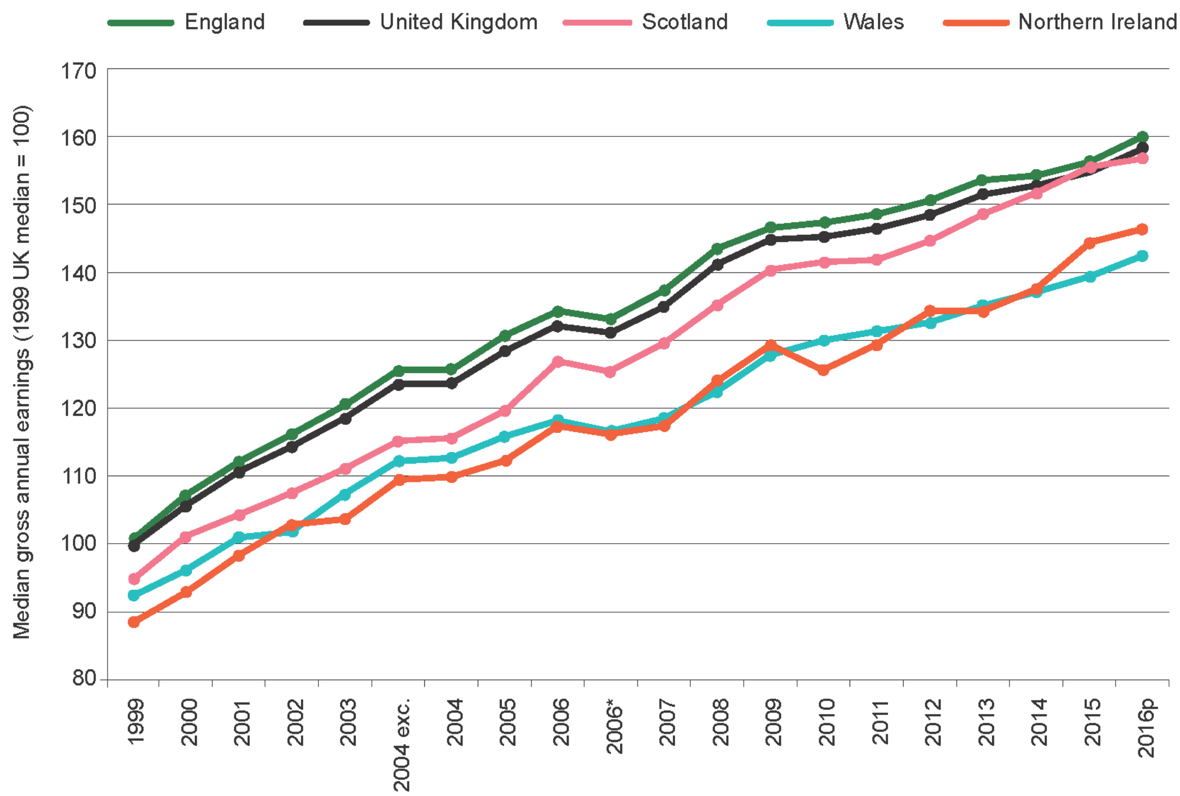
Average levels of household income, wealth and earnings all vary by area. Annual earnings reflect differences in rates of pay and hours of work (representing differences in unemployment and regular hours of work). Figure 28 shows how annual average (median) gross earnings for full-time employees vary between England, Scotland, Wales and Northern Ireland. Average earnings in the UK in 1999 have been indexed to 100 and therefore the series shows how average earnings have changed over time relative to UK average earnings in 1999. Average annual earnings in England are marginally above the UK average and have increased by 60%

over this time period (note: there are some breaks in the series). Average annual earnings in Wales and Northern Ireland are consistently lower than in England and Scotland. Average annual earnings in Scotland have increased in relative terms so that by 2014 they were virtually the same as the UK average, but have since fallen behind earnings growth in England. On the other hand, growth in average annual earnings in Wales and Northern Ireland have not kept pace with the increases observed in England and Scotland (particularly earnings growth in Wales), and this has resulted in an increase in earnings inequalities between the UK constituent countries.

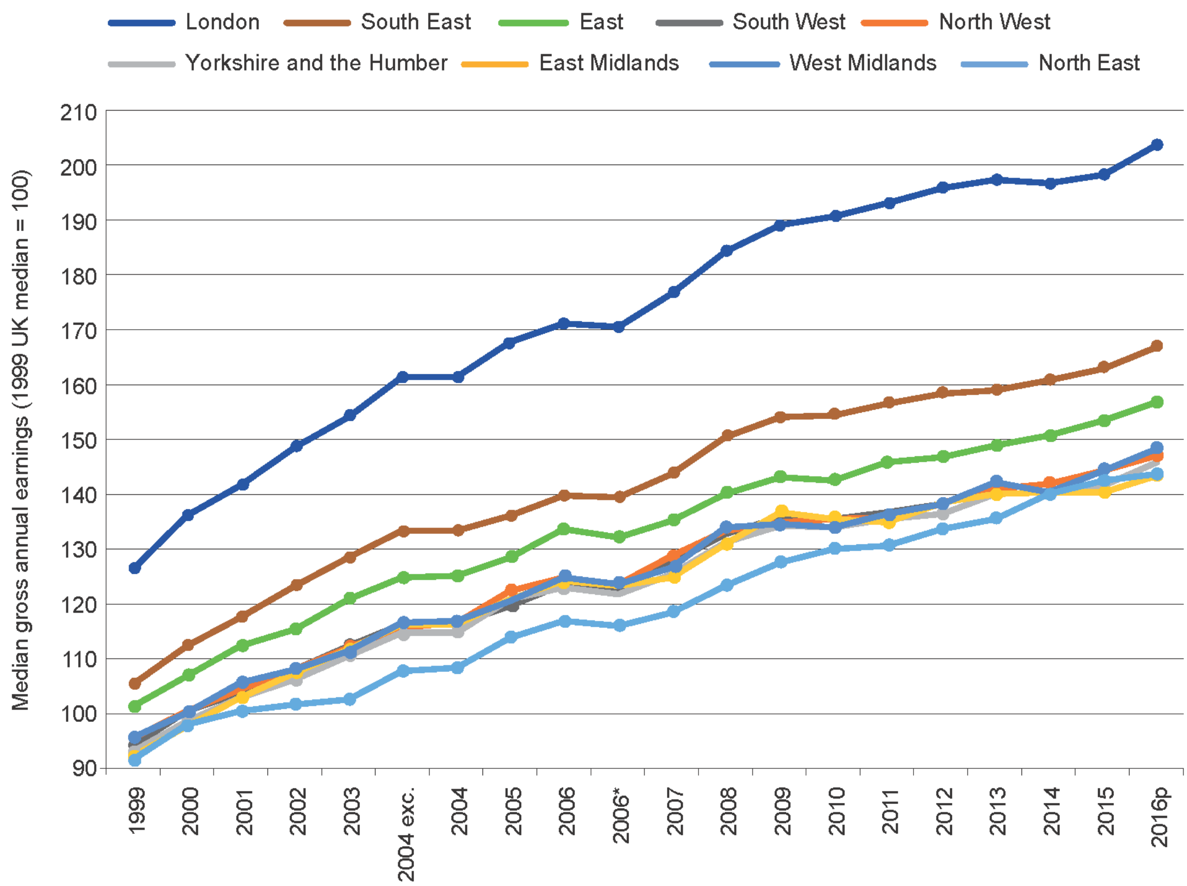
The second panel of Figure 28 shows trends in average annual earnings within English regions relative to UK average earnings in 1999 (=100). This shows the much greater growth in average annual earnings in London which results in a wide gap in average earnings between London and all other English regions. Annual average earnings growth has also been relatively high in the South East of England. Lowest annual average earnings are found in the North East of England for most of this period, although relatively high earnings growth since 2013 has meant that annual earnings in the North East of England are now similar to other regions outside London, the South East and the East of England. The overall result is an increase in average earnings inequality among full time employees between London, the South East and the East relative to other English regions.

Figure 28: Trends in median gross annual earnings 1999–2016 – 1999 UK median = 100

a) UK and constituent countries



b) English regions



Source: ONS Annual Survey of Hours and Earnings, 2016.
Notes: See Figure 13 notes. Annual earnings of full-time employees.

Spatial aspects of public expenditure and investment

Spatial inequalities in outcomes, including poverty, can be addressed through spatially redistributive social policy in the form of people-based or place-based policies (or a combination of the two). With the majority of funding decisions still being taken by UK national or sub-national governments, it is clear that a successful anti-poverty strategy needs to involve a coherent and coordinated approach between national and sub-national policy makers. Although funding formulae are set by the UK government, local areas are having a greater say on how these budgets are spent and this potentially means that, with better local knowledge on the root causes of poverty and disadvantage, budgets can be directed more effectively at tackling poverty.

Revenue raising powers are almost exclusively held by the UK government. The main exceptions are council tax and business (i.e., non-domestic) rates. The Scottish government has had control of council tax and business rates in Scotland and the power to impose a ‘Scottish Variable Rate’ (SVR) of income tax (the ability to amend the basic rate of tax by up to 3p in the £) since the Scotland Act 1998. The Scotland Act 2012 devolved the power to set a Scottish rate of income tax (SRIT) from April 2016, and to introduce taxes on land transactions and on waste disposal from landfill, replacing the existing UK-wide Stamp Duty Land Tax and Landfill Tax from April 2015. The Act also provides powers for new taxes to be created in Scotland and for additional taxes to be devolved, subject to certain criteria (House of Commons Library, 2015). Wales retains revenue from council tax and business rates. Northern Ireland has maintained a system of domestic and business rates and retains revenue from these taxes. From 2013, English councils have been able to retain 50% of business rates, and from 2020 they will be able to retain 100%. Councils have been limited in the extent to which rates can be increased; for example, council tax rates have largely been frozen since 2007. However, while there is an argument for local administrations to have a greater say over local spending levels and priorities, greater freedom to raise money at a local level won’t necessarily lead to an increase in spending in areas where needs are greater. One problem is that areas with higher levels of deprivation typically have lower capabilities to raise tax revenue and more affluent areas could cut local taxes to further attract self-interested wealthy households to the area, which could create a ‘race to the bottom’.

In the UK, public expenditure is mainly made on a people/enterprise basis and not a place basis; but regional analysis identifies important inequalities. Examination of data from the National Accounts highlights regional disparities in public expenditure on services (Table 7). These data show expenditure based on the location of individuals/enterprises who are deemed to be the beneficiaries. Public expenditure is planned and controlled on a departmental basis, except where there is devolved responsibility. Several areas of expenditure are planned on a UK-wide or a GB-wide basis – e.g. social security is the responsibility of the Department for Work and Pensions throughout Great Britain (not Northern Ireland). Where there is devolved responsibility to Scotland, Wales and Northern Ireland, block grants (based on historical decisions and additional changes which are determined by the Barnett formula) determine country/regional allocation of resources. This accounts for around 85% of devolved governments’ funding. The Barnett formula is used to compute additional changes to the block grants based on any change in expenditure in England multiplied by the size of the population living in devolved administrations relative to the size of the English population. This figure is then multiplied by a factor reflecting the extent to which the devolved administration is responsible for delivering services.[26]

Table 7: Total identifiable expenditure on services by country and region, per head – indexed (UK identifiable expenditure = 100) and £ – and poverty rates

	2013/14			2014/15		2012/13–14/15
	Index	**£**		**Index**	**£**	**AHC poverty rate (%)**
North East	106	9,316		105	9,347	22
North West	103	9,109		103	9,197	22
Yorkshire & Humber	96	8,508		97	8,660	22
East Midland	91	8,033		92	8,159	20
West Midlands	97	8,513		97	8,683	23
East	89	7,817		88	7,881	18
London	111	9,827		110	9,840	27
South East	88	7,745		87	7,756	18
South West	93	8,217		93	8,295	19
England	97	8,563		97	8,638	21
Scotland	115	10,171		116	10,374	18
Wales	110	9,740		111	9,904	23
Northern Ireland	124	10,899		125	11,100	21
UK	100	8,820		100	8,913	21

Source: PESA, 2016; Table 9.2

Note: Poverty rates from DWP (2016); Households below average income: 1994/95 to 2014/15

These expenditure figures highlight not just the fact that residents in England receive a lower level of expenditure per head than their Scottish, Welsh and Northern Irish counterparts but the considerable amount of variation that exists between English regions. This appears to leave residents in the East of England, the East Midlands and the South West particularly disadvantaged, even taking into account that some of this expenditure is needs-based. For reference, the final column of Table 7 shows after-housing costs income poverty rates. On the basis of allocating funds according to differences in poverty rates (as a measure of need), both Scotland and Northern Ireland appear to have a greater share of expenditure relative to need, and London a smaller share relative to need. However, taking such an approach takes no account of geographical variation in the effectiveness of expenditure in terms of tackling poverty; poverty rates may be lower in a region as a direct consequence of higher expenditure.

Another form of expenditure that shows regional disparity is infrastructure spending. This type of expenditure is considered to be an important determinant of economic growth and therefore spatial disparities have implications for long-term economic disparities. Research by the Institute for Public Policy Research (IPPR), based on the HMT National Infrastructure Pipeline 2014 dataset, has highlighted large regional differences in public infrastructure spending relative to population size (Cox and Davies, 2014). Cox and Davies (2014) show that capital investment per head is considerably higher in London than the rest of England (their analysis is limited to England) (Figures reproduced in Table 8). This, they state, puts London at an unfair advantage and is an important factor contributing to higher London growth rates. The most fortunate region outside London is the North West, but further analysis by *The Guardian* newspaper found that decommissioning Sellafield nuclear plant in Cumbria accounted for more than half of the North West infrastructure spending – 'hardly an infrastructure 'improvement' as most people would understand it' (*The Guardian*, 7 August 2014).

Although these figures are for projects whose benefits apply to residents within specified geographical regions rather than those designed to benefit the entire country, e.g. HS2 is not included, it has been argued that infrastructure spending benefits commuters as well as residents. The estimate for London is reduced by around 9% when analysis takes account of commuters as well as residents, but remains considerably higher than for other English regions[27] (research conducted by *The Guardian* and reproduced in the final column of Table 8).

Table 8: Public infrastructure expenditure by English region

	Per resident (£)	Per resident and commuter (£)
London	5,426	4,952
North West	1,248 (599*)	1,226
East	614	593
Yorkshire & Humber	581	569
South East	502	483
South West	474	433
East Midlands	438	425
West Midlands	389	380
North East	223	321

Source: Cox and Davies (2014) and *The Guardian* analysis, reported on 7 August 2014; based on HM Treasury data (2014) and ONS population and commuter estimates.

*This figure excludes expenditure on decommissioning Sellafield Nuclear power station.

In other research, disparities in capital expenditure on transport have also been highlighted (Cox and Schmuecker, 2011), with London and the South East (40%) receiving a disproportionately large share of this type of investment relative to the North (23%); even after Crossrail, London Underground and Thameslink are excluded.

Despite the fact that London and the South East of England were expected to be hit relatively hard by the economic downturn following the financial crisis of 2007/08, given the origin of the crisis in the banking sector and the concentration of financial services in London, this has proved to be far from the case (Lupton *et al.*, 2016). Growth in London (measured by cumulative growth of gross value added) far outstripped every other English region after 2009 and far outstripped the North East, North West and Yorkshire and the Humber ('the North') which suffered the worst declines (Lupton *et al.*, 2016, drawing on data from Martin *et al.*, 2015). Lupton *et al.* (2016) also show that some of the highest levels of concentration of deprivation at the neighbourhood level, measured by the index of multiple deprivation (IMD) in 2010 and 2015 (percentage of neighbourhoods in bottom 10% of the IMD in each region), continued to be found in the North West despite falling significantly (27% to 19%). Falls were also observed within London (12% to 6%), but increases were observed in the North East (9% to 17%) and the East Midlands (6% to 8%). Of course, it is important not to get too carried away with the notion that London is made up of a 'privileged metropolitan elite'. As Vizard *et al.* (2015) highlight through their meticulous analysis in *The Changing Anatomy of Economic Inequality in London (2007–2013)*, considerable inequalities by population groups exist within London and inequalities are higher in London than elsewhere in England for a range of indicators. However, long-run spatial inequalities exist across the UK, which need to be tackled in terms of funding allocations and national and local policy initiatives. As Lupton *et al.* (2016) conclude '*Arguments for spatially redistributive social policies can be made on grounds of equity and social justice as well as on grounds of economic efficiency*' (p. 315).

As Lodge, Henderson and Davies (2015) note in their review of poverty and devolution in the UK (*Poverty and Devolution: the Role of Devolved Governments in a strong National Social Security System*), anti-poverty measures depend on a mix of UK and devolved policy interventions. They highlight that major areas of economic development – education, health and housing policy – are the responsibility of devolved administrations. However, social security is not devolved other than to a limited extent in Northern Ireland, although there has been some strengthening of the fiscal powers of the Scottish parliament and the Welsh assembly since the 2014 Scottish independence referendum. In their study, conducted on behalf of the Joseph Rowntree Foundation, Lodge, Henderson and Davies assess variations in poverty across the UK, examine different approaches to tackling poverty in recent years and assess whether further devolution of powers could enhance efforts to reduce poverty, looking in particular at control over a limited number of social security benefits. They point out that there is a stronger case for:

> *'devolving control of distributive public services because the devolved institutions are best placed to ensure these services most effectively reflect local preferences and meet local conditions, it is normally held that redistributive functions – which entail the transfer of resources from one section of the people to another – are best exercised at the UK level. The UK government can draw on a wider tax base than can the individual nations to fund redistribution, and social security in this sense is a form of risk pooling. There is a clear economic logic for the nations of the UK coming together to pool risks and share financial resources across the largest possible area.'* (p. 9)

The payment of benefits is cyclical in nature (such as Jobseeker's Allowance) or contribution based (such as pensions) which make them unsuitable for devolution, but they identify three areas where there is a case for greater devolution for the purpose of poverty reduction: Attendance Allowance, Housing Benefit, and Active Labour Market Policy (the Work Programme). The task would not be straightforward; for example, Housing Benefit would have to be taken out of Universal Credit, but they believe that gains could be made. They also suggest that an alternative approach could be to allow devolved governments to supplement UK benefits, using funds from devolved budgets; the result would be that the UK government would effectively set a floor level for benefits. In some areas and to some extent this already occurs, with Scotland establishing a £20m emergency fund to deal with problems associated with the under-occupancy charge (the so-called bedroom tax) and the Northern Ireland government reaching agreement with the UK government to waive this charge for existing tenants (on the basis of lack of supply of smaller dwellings). Scotland and Wales still maintain full council tax rebates for low-income families, paid for out of their budgets, and Scotland, Wales and Northern Ireland still offer free prescriptions.

7.5. POLITICAL ECONOMY

In this section we review the evidence on the link between aspects of political economy and inequality and poverty. We examine evidence on austerity, the relationship between riches and access to political power and decision making, political representation, legal frameworks and voting.

Key points

- While some politicians and economists see austerity as necessary to revitalise the economy following the financial crisis and the economic downturn, others are more sceptical about the motive for, and the scale of, the cuts. Sceptics view the zeal with which some governments are practising austerity as a smokescreen for shrinking the size of the welfare state.
- Some analysts assessing austerity in the UK, critique the most recent UK governments' (Coalition and Conservative) attempts to recoup the debt incurred from bailing out banks and fiscal stimulation packages through extensive reductions in public expenditure, particularly welfare spending. These analysts argue that this approach has been packaged and 'sold' under the guise of fiscal prudence, frugality and self-sufficiency, and the notion that we are 'all in this together'. Some analysts have drawn parallels with mistakes made at the onset of the Great Depression when public expenditure cuts depressed economic growth, and see this as a sign of blinkered neoliberalism (Callinicos, 2012). Evidence of a strong negative relationship between austerity and growth is used to support the theory that, rather than austerity revitalising economies, it hinders their recovery. Ultimately, they argue, economies

need to grow their way out of the current debt crisis, as the scale of debts simply cannot be repaid through cutting expenditure.

- The action of the wealthy with access to powerful political networks is one theory to explain why inequality in the form of concentration of income and wealth at the top has increased. The nature of campaign contributions, policy responsiveness as a function of constituent income, and access to elite occupations or political posts demonstrate how the rules of the political game appear to have been tilted.
- Political economy models have shown how the middle class tends to determine the outcome of elections, since they have reason to form affinities with both low-income individuals and the wealthy.
- The electoral system appears to play an important role in determining which motive dominates, with empirical evidence supporting the theory that centre-right governments tend to dominate in majoritarian systems, while centre-left governments tend to dominate in proportional representation systems, which tend to redistribute more than centre-right governments.
- There is a growing recognition of the role of tax havens in perpetuating inequality and reducing the potential for governments to tackle inequality due to their impact on government revenues. Due to the role that policy and legal rules play in allowing the development of these havens, some legal scholars have argued that inequality is 'more a question of law than economics' (Hsu, 2015). They see the solution to reducing inequality, particularly where inequality has been driven by high returns to private capital, as very much a legal one.
- One area in which there is scope to find a legal solution is the regulation of excess remuneration among financial sector workers, CEOs and top executives. The European Union recently introduced regulations to curb bankers' bonuses (creating a stronger link between pay and longer term productivity) and excessive pay for CEOs and top executives, but legal challenges are limiting the effectiveness of this legislation, highlighting the difficulty of implementing reforms to rules that will disadvantage wealthy and powerful people.

Unequal turnout in general elections – where lower income individuals are less likely to exercise their right to vote – results in pivotal voters having higher than average incomes. There is some evidence that this leads to the voting electorate being less likely to vote in favour of redistribution than the population at large. This tendency may contribute to a trend towards entrenched levels of inequality and poverty as disenfranchised members of the electorate become attracted to populist parties and candidates.

The rise of a rich and powerful elite influencing the direction of government policy to benefit the already-well-off at the expense of policies to help those most in need has been suggested by a number of experts as one of the key explanations for high rates of inequality (Stiglitz, Piketty, Atkinson etc.). This can become a vicious circle, with lower income individuals withdrawing from the voting booths because political parties are doing little to represent them, while these political parties instead focus on policies that benefit the profile of the voting electorate. In the UK there is a strong social gradient in voter turnout and this gradient became steeper after the rise in inequality (McKnight and Tsang, 2014).

In understanding how to achieve a more equal, more balanced, and more stable economy, one can use the field of political economy as a means of understanding governance and responsiveness. Many politicians and media commentators may point to the economic phenomena of globalisation, technological shifts, and demographic change as causes for increases in inequality. However, solely examining those factors would downplay the important role of politics and public policy in generating and perpetuating inequality; '…these changes are not orthogonal to political decisions that are taken – or decisions not taken' (Bonica *et al*., 2013, p. 121). In this section, we discuss government policies and practices that could ameliorate or exacerbate poverty and inequality, such as: increased austerity; the role of elite donors to individual campaigns and political parties; varying electoral systems and their propensity for redistribution; legal frameworks moulded by the well-off; the patterns revealed by winner-take-all politics; and propensities of voting – all in the vein of political economy.

Austerity

In an age of fiscal constraints due to the slow rebound after the 2008 global financial crisis, governments – including the United Kingdom government – are practising austerity in an attempt to revitalise the economy. Some view this attempt at revitalisation as a genuine and necessary aim of government, while others are more sceptical about the motive and scale of the cuts.

> *'Austerity is a form of voluntary deflation in which the economy adjusts through the reduction of wages, prices, and public spending to restore competitiveness, which is (supposedly) best achieved by cutting the state's budget, debt, and deficits.'*
>
> (Blyth, 2015, p. 2)

More importantly, influential scholars such as Thomas Piketty, Mark Blyth, Joseph Stiglitz, Paul Krugman and Antony Atkinson often advocate against austerity. 'The worst solution [to public debt] in terms of both justice and efficiency is a prolonged dose of austerity – yet that is the course Europe is currently following' (Piketty, 2014, p. 541). Whereas, Blyth (2015), a little punchier, states that '… the policy of austerity is more often than not exactly the wrong thing to do precisely because it produces the very outcomes you are trying to avoid' (Blyth, 2015, p. 2). In fact, as Schaltegger and Weder (2014) note, previous empirical evidence exists on the impact of austerity measures and austerity policies which are associated with significant increases in poverty and income inequality (see: Smeeding, 2000; Mulas-Granados, 2005; Agnello and Sousa, 2012; Ball *et al.*, 2013; and Woo *et al.*, 2013). This evidence is corroborated by a more recent study by Bohoslavsky (2016), who argues that austerity measures often 'have terrible social impacts, exacerbating inequality and pushing disadvantaged groups below minimum income thresholds.' Through analysing data from 50 countries in the years 2007, 2009 and 2011, Aizenman and Jinjarak (2012) find that 'higher income inequality is associated with a lower tax base, lower de-facto fiscal space, and higher sovereign spreads' (p. 431). These results suggest that countries with higher levels of economic inequality tend to adjust to economic crises by 'attempting to minimize their adjustment burden' through decreases in public expenditure rather than raising taxes (Aizenman and Jinjarak, 2012, p. 442).

Blyth even references the position of the United Kingdom as 'in as bad shape as anyone else' (2015, p. 2), referring to PIIGS (Portugal, Italy, Ireland, Greece, and Spain). 'Despite their tightening,' he writes, 'the United Kingdom's economic indicators are very much pointing the wrong way, showing again that austerity hurts rather than helps' (Blyth, 2015, p. 4). And in reference to a governmental dilemma of rising inflation or increased austerity, Piketty suggests that a little more inflation 'is no doubt preferable' (2014, p. 546). Paul Krugman, Nobel Laureate in Economics, speaking directly on the economics of the austerity issue, writes, 'Harsh austerity in depressed economies isn't necessary, and does major damage when it is imposed. That was true of Britain five years ago – and it's still true today' (2015). This evidence review will now attempt to delve deeper into the UK austerity context.

United Kingdom

Krugman recounts the 'austerity fever' which gripped the world in 2010 as 'a strange malady that combined extravagant fear with blithe optimism' (2015). The narrative was that '[e]very country running significant budget deficits – as nearly all were in the aftermath of the financial crisis – was deemed at imminent risk of becoming another Greece unless it immediately began cutting spending and raising taxes' (Krugman, 2015). In addition to this comparison to Greece, MacLeavy writes that austerity has become 'shorthand for an increasing focus on frugality, self-sufficiency and fiscal prudence in contemporary economic and political life' (2011, p. 357). But economists and social policy scientists see past this austerity 'motif' which attempts to recoup the debts incurred from bailing out banks and fiscal stimulus packages (MacLeavy, 2011, p.

357). In the UK, the austerity plans of the Coalition and Conservative governments attempted to 'garner public support for the reduction or withdrawal of welfare entitlements' through an appeal of self-sufficiency, thus shifting cuts onto an already-vulnerable population (MacLeavy, 2011, p. 355). The post-2008 priority for political elites and the new policy norm became reducing the deficit through extensive reductions in public expenditures, particularly welfare spending (Callinicos, 2012, p. 66). MacLeavy goes further:

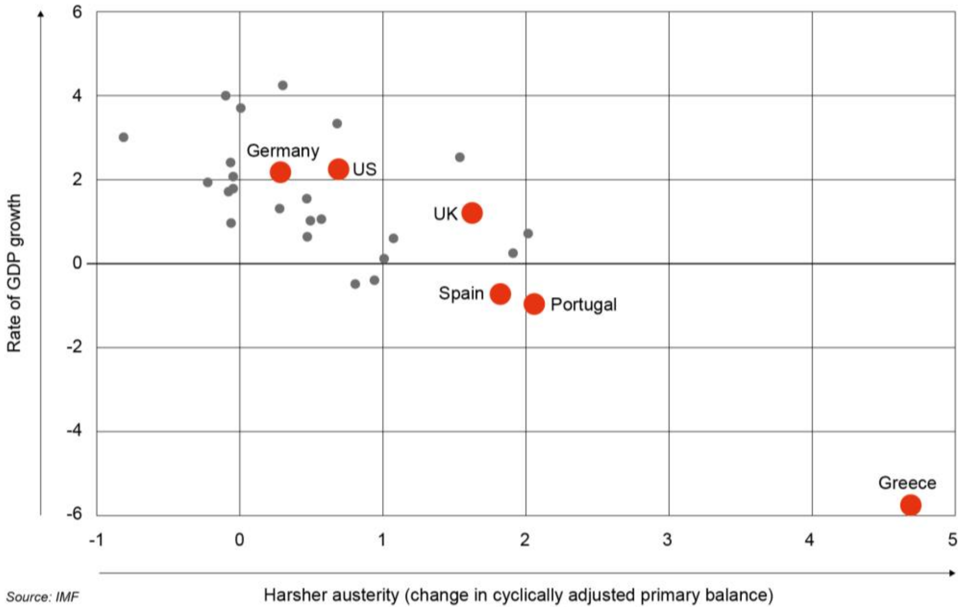
> *'Given the current need for stringency in budgets, it is perhaps unsurprising to find nostalgic sentiments about being 'in this together' [and 'responsible politics'] used to mobilize the public around the need for strenuous action to protect government solvency and to gain political support for the public expenditure cuts and tax raises necessary to address the growing national debt.'*
>
> (MacLeavy, 2011, p. 357)

The austerity being practised in the UK calls for the 'British public to fill the void created by a now retreating state, rather than on the state to develop new policies in response to the emergence of new social risks' (MacLeavy, 2011, p. 359). These social risks materialise in individuals and families who are often younger, female, and those with a low-level or outdated skill set relying on 'atypical' patterns of labour market participation which make them more vulnerable to loss of welfare under austerity and an even greater potential of loss of political mobilisation (MacLeavy, 2011, p. 360). Middle-income households have seen support for both working and non-working parents withdrawn, as provisioning for care and paid employment is transferred from the state to the family (MacLeavy, 2011, p. 356).

In addition to this call for 'responsible politics' under austerity, we also see a call for increased competitiveness in the global market economy. However, Callinicos warns that this shift to austerity in the name of competitiveness 'risks repeating the mistakes of the governments that responded to the onset of the Great Depression by cutting public expenditure' (2012, p. 66). He goes on to argue that disregarding the mistakes of the Great Depression era and further calls 'for austerity demonstrate how deeply entrenched neoliberalism as an ideology has become, and that political, media and academic elites consequently are unable to think beyond the intellectual horizons set by the free-market revolution of the 1970s and 1980s' (Callinicos, 2012, p. 69). Evidence collected by Krugman demonstrates, however, that this neoliberal path to competitiveness via austerity actually depresses economic growth while disadvantaging those at the bottom of the distribution, i.e. welfare recipients.

> *'In Chart 2 [Figure 29], each dot represents the experience of an advanced economy from 2009 to 2013, the last year of major [implemented] spending cuts; [however, large spending cuts loom over the UK and other European nations]. The horizontal axis shows a widely used measure of austerity – the average annual change in the cyclically adjusted primary surplus, an estimate of what the difference between taxes and non-interest spending would be if the economy were at full employment. As you move further right on the graph, in other words, austerity becomes more severe … Meanwhile, the vertical axis shows the annual rate of economic growth over the same period. The negative correlation is, of course, strong and obvious – and not at all what the austerians had asserted would happen.'*
>
> (Krugman, 2015)

Figure 29: Austerity and growth 2009–13

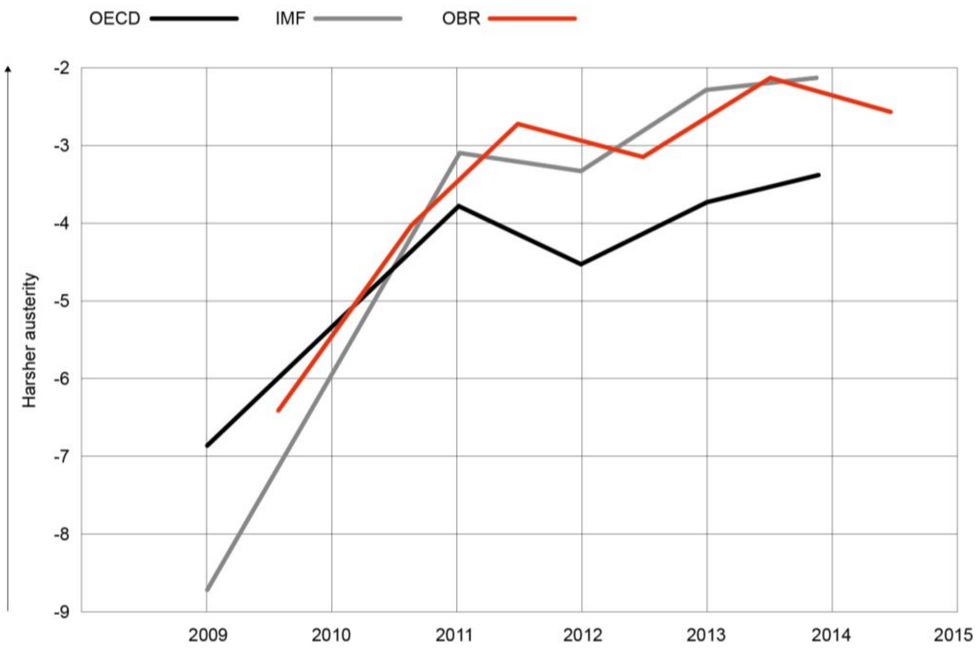


Source: Krugman, 2015

This relationship still holds, even if Greece is treated as an outlier and excluded from the analysis. Between 2009 and 2013, the 'global turn to austerity', Krugman argues that 'every country that introduced significant austerity has seen its economy suffer, with the depth of the suffering closely related to the harshness of the austerity' (Krugman, 2015). He goes on to further elaborate on the UK context.

> *'British austerity, while very real and quite severe, was mostly imposed during the coalition's first two years in power. Chart 3 [Figure 30] shows estimates of … the cyclically adjusted primary balance since 2009. I've included three sources – the IMF, the OECD, and Britain's own Office of Budget Responsibility [sic] … [E]very one tells the same story: big spending cuts and a large tax rise between 2009 and 2011, not much change thereafter. Given the fact that the coalition essentially stopped imposing new austerity measures after its first two years, there's nothing at all surprising about seeing a revival of economic growth in 2013.'*
> (Krugman, 2015)

Figure 30: Austerity in the UK (Cyclically adjusted primary balance, percent of GDF)



Source: Krugman, 2015 (IMF, OECD and OBR)

Krugman, somewhat dismissively, concludes that the 'the economics of austerity are the same – and the intellectual case is bankrupt – in Britain as everywhere else' (2015). Rather, he, MacLeavy and others call not for 'belt-tightening, but further spending' as an anti-austerity, economic prosperity policy response (MacLeavy, 2011, p. 357).

Austerity measures clearly have had a negative impact on the financially vulnerable across Europe. However, some evidence suggests that alternatively, one could argue that inequality is also a key factor in understanding the political climate during financial crises, which lead to the implementation of austerity measures to begin with. And, as Bohoslavsky (2016) notes, 'inequality adversely affects social and political stability, hampering growth', wherein these levels of inequality 'eventually [affect] both government revenue and spending.'[28]

A potential avenue for researching further linkages between austerity, inequality and poverty could be analysing the political climate and government structures which impact fiscal adjustment policies beforehand, in order better to take into account concerns for public expenditure pre-financial crises. For example, Schaltegger and Weder's 2014 study found that 'fiscal adjustments by coalition governments are associated with significantly lower levels of inequality than those implemented by single party or minority governments.' Such evidence raises questions regarding the relationship between income, wealth and access to political power and decision making, which will be further explored in the next section.

The relationship between income/wealth and access to political power and decision making

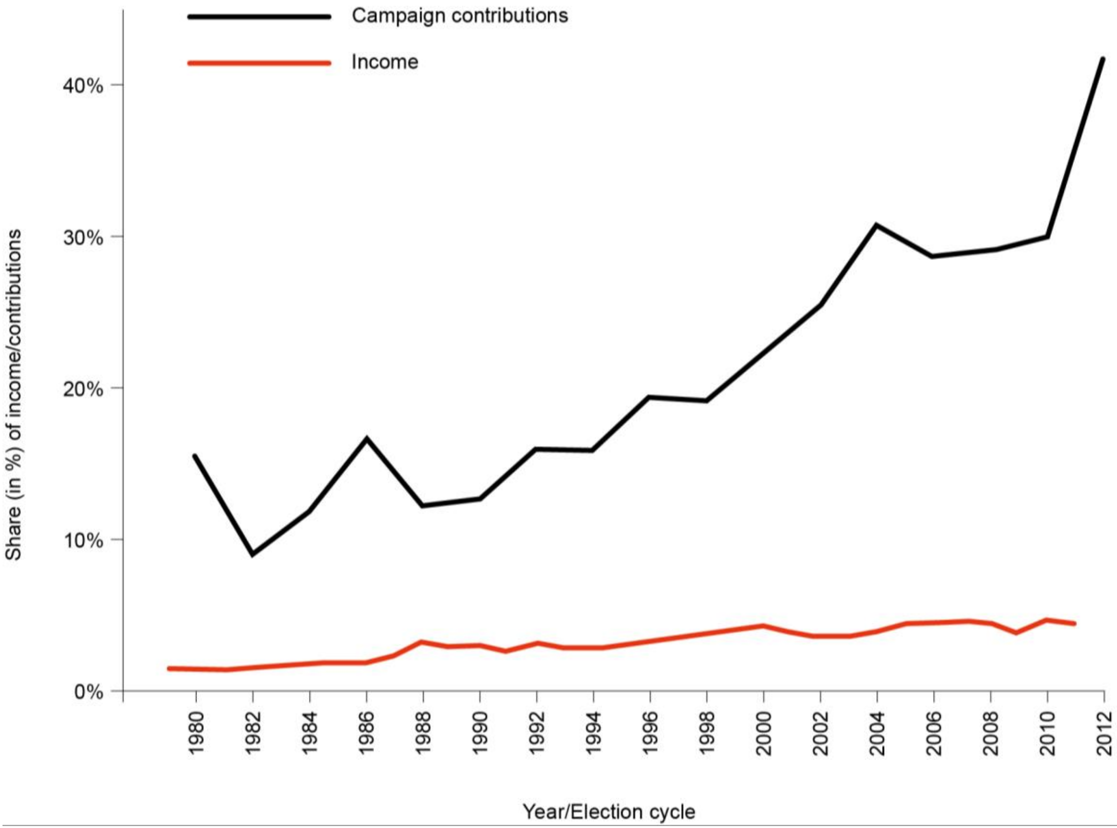
It is important not only to understand the historical and modern-day trends of income and wealth inequality in the UK and other advanced democracies, but equally important is to understand how the money at the top of that distribution is leveraged to gain access or cement position in other, non-financial arenas. Joseph Stiglitz (2012) argues that the inequality that exists today 'did not arise spontaneously from abstract market forces'; rather, it was shaped and contorted by those who had access to certain networks of power (p. 118). One of those networks is politics and policy making. Moreover, does access to large amounts of income and wealth also allow one to gain access to and influence high-level decision makers in British government? Stiglitz views this as influencing the rules of the economic game, set by the political process, through the stacking of cards in favour of those at the top. He writes:

> *'The perception that they [the rules of the political game] are set in ways that are unfair—that they give disproportionate power to economic elites, in a way that further strengthens the economic power of those at the top—reinforces political alienation and a sense of disempowerment and disillusionment.'*
>
> (Stiglitz, 2012, p. 131)

This section of the evidence review uses examples of campaign contributions, policy responsiveness as a function of constituent income, and access to elite occupations or political posts as a means of explaining how the rules of the political game have been tilted.

Although to some degree the sheer scale of campaign contributions is quite unique to the United States, the data revealing donor patterns should sound alarms to those across the world concerned with reducing inequality and poverty. For decades, democratic forms have coexisted with massive increases in economic and social inequalities in the United States, the United Kingdom, and in many other advanced democracies. 'Moreover, these new inequalities have primarily benefited the top 1% and even the top 0.01%' (Bonica *et al*., 2013, p.103). In the United States, the share of total income received by the top 0.01% of households is 5%, but the share of campaign contributions made by the top 0.01% of the voting age population is over 40% (Bonica *et al*., 2013, p.111; Piketty and Saez, 2013). This is represented graphically in Figure 31.

Figure 31: Concentration of income and campaign contributions (US)



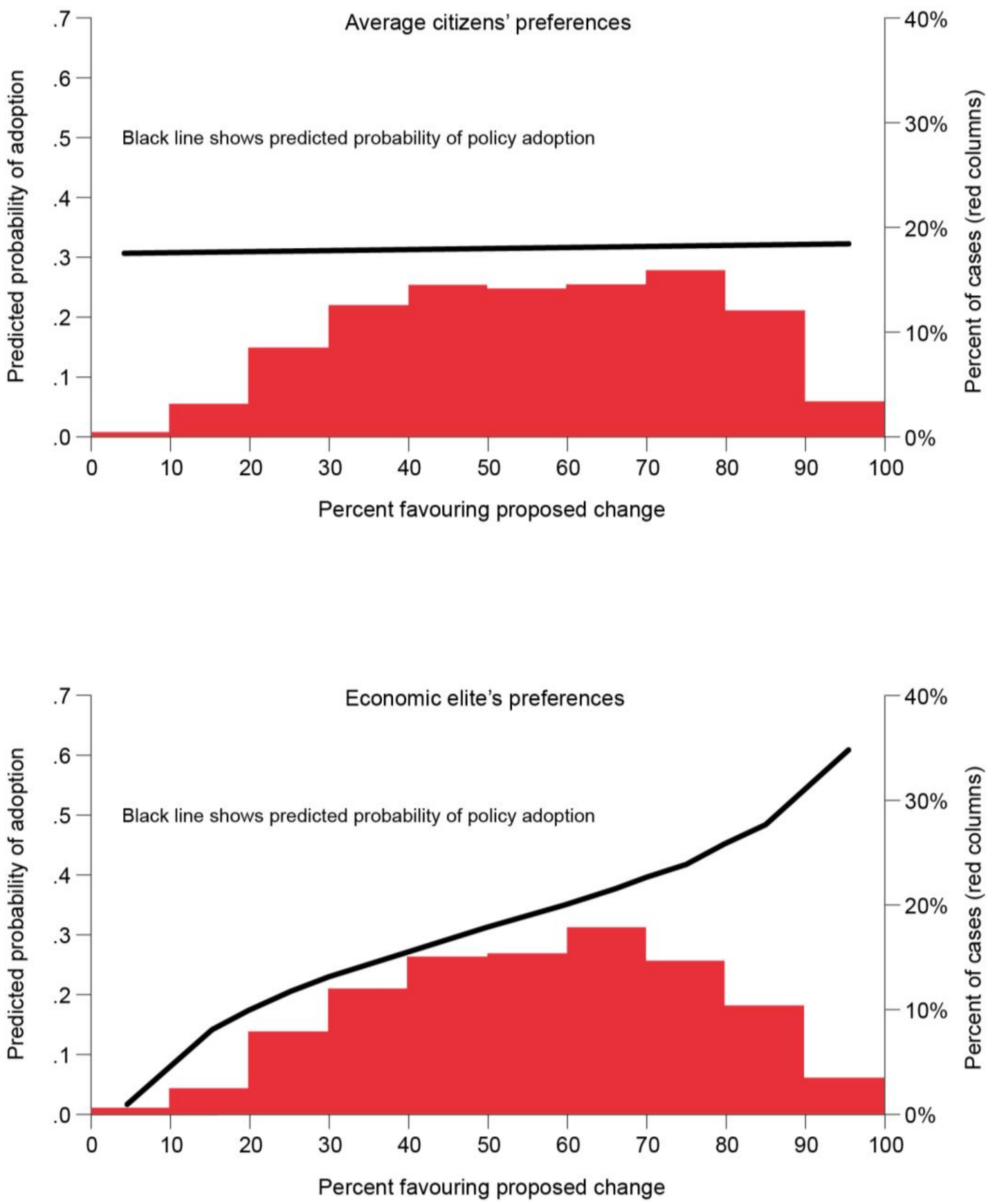
Source: Bonica *et al*., 2013, p. 112

Notes: Source for income data, Piketty and Saez (2013).

The dark line tracks the share of campaign contributions in all federal elections donated by the top 0.01 percent of the voting age population. The number of donors included in the 0.01 percent share of voting age population grew from 16,444 in 1980 to 24,092 in 2012. During the same period, the minimum amount given to be included in the top 0.01 percent grew in real terms from $5,616 to $25,000 (in 2012 dollars). The shaded line tracks the share of total income (including capital gains) received by the top 0.01 percent of households. The figure includes individual contributions to Super PACs and 527 organizations but excludes contributions to nondisclosing 501c (4) organizations, which are recorded to have spent approximately $143m in 2010 and $318m in 2012, much of which was raised from wealthy individuals. Were it possible to include contributions to nondisclosing 501c(4)'s, the trend line would likely be 1–2 percentage points higher in 2010 and 2012.

In addition to the mapping of these campaign contributions, Gilens and Page (2014) also examine policy responsiveness of American politicians based on the income level of the group demanding the policy change. This is graphically represented in Figure 32, where Gilens and Page found that a policy position supported by an 'average citizen' has approximately a 30% probability of being adopted, no matter the favourability rating; whereas the likelihood of adoption of a policy position supported by an 'economic elite' increases as favourability increases (2014, p. 573). Furthermore, the preferences of economic elites (as measured by our proxy, the preferences of 'affluent' citizens) have far more independent impact on policy change than the preferences of average citizens do. To be sure, this does not mean that ordinary citizens always lose out; they fairly often get the policies they favour, but only because those policies also happen to be preferred by the economically elite citizens who wield the actual influence (Gilens and Page, 2014, p. 576).

Figure 32: Predicted probability of policy options by policy disposition



Source: Gilens and Page, 2014, p. 573

Gilens and Page (2014) found that, in the United States, the majority does not necessarily rule in the sense of actually determining policy outcomes (p. 576). Rather, '[t]he net alignments of the most influential, business-oriented groups are negatively related to the average citizen's wishes' (p. 576). Gilens and Page also take exception to the argument that average citizens are inattentive and ignorant to politics and policy, while elites enjoy a greater level of expertise (p. 576).

> *'We believe instead that – collectively – ordinary citizens generally know their own values and interests pretty well, and that their expressed policy preferences are worthy of respect. Moreover, we are not so sure about the informational advantages of elites … Most important, we see no reason to think that informational expertise is always accompanied by an inclination to transcend one's own interests or a determination to work for the common good.'*
>
> (Gilens and Page, 2014, p. 576)

Further study is needed on policy responsiveness of UK elected officials in relation to varied income groups. Additionally, the pernicious role of large campaign contributions is not as evident in the United Kingdom, but increasing attention is being paid. The Political Parties, Elections and Referendums Act (PPERA) of 2000 was a landmark reform introduced in the UK which established ‘a new regulatory system for party funding and election spending in the UK’ The Act arose ‘from cross-party agreement about the need to address widespread public concern about party funding issues’ (Wilks-Heeg and Crone, 2010, p. 5). Wilks-Heeg and Crone cite the new-found fiscal constraints that are beginning to be imposed on UK political parties, and claim that these parties have begun to increase reliance on attracting large donations.

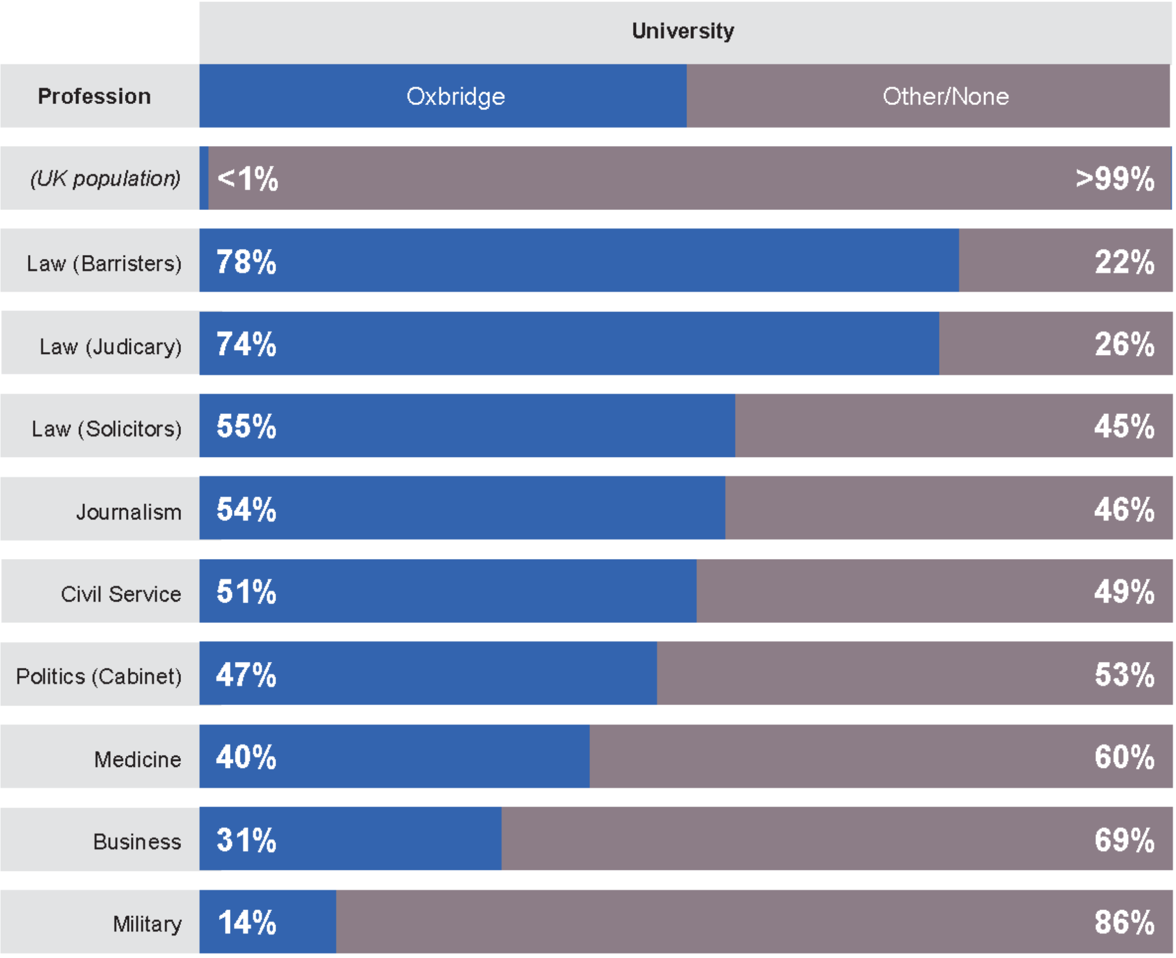
> *“Labour has traditionally relied on the trade unions, and the Conservatives on corporate funding. Since the early 1990s, however, large individual donations have grown in importance, accounting for between 25 and 60 percent of the two larger parties’ income over the last decade. This dependence on the patronage of wealthy individuals is particularly obvious during general election campaigns and is at the root of most concerns about ‘sleaze’.”*
>
> (Wilks-Heeg and Crone, 2010, p. 8)

It is relatively rare to read of serious British campaign finance corruption; however, allegations of impropriety are somewhat more common. ‘Media investigations have shown that some large donations to political parties tend to coincide with nominations for peerages or specific policy decisions’ (Wilks-Heeg and Crone, 2010, p. 12).

It is important to pose the question, ‘Why would a wealthy individual contribute large sums of money to either a political party or policy cause?’ Bonica *et al*. demonstrate this ‘rising wealth of the super-rich and an increased willingness to spend large sums on elections’ (2013, p. 112). Perhaps the answer lies in the findings of Gilens and Page (2014) where wealth yields ‘Economic-Elite Domination’ in which policy making is a game dominated and won by those with substantial economic resources (p. 566).

The Sutton Trust recently published a study titled *Leading People 2016*, which revealed the educational backgrounds of the UK’s professional elite across a range of sectors. For the purposes of this evidence review, we examine those of law, politics and business elites. The report revealed ‘the staying-power of the privately educated at the top of the UK’s professional hierarchy’ (Kirby, 2016). The report found that while only 7% of the UK population attended an independent (non-state) school, 74% made up the elite judiciary, 71% made up the elite barristers, 50% made up the political class and 34% made up the business elites (Kirby, 2016, p. 4) (Figure 33).

Figure 33: Professional occupations by school/university attended

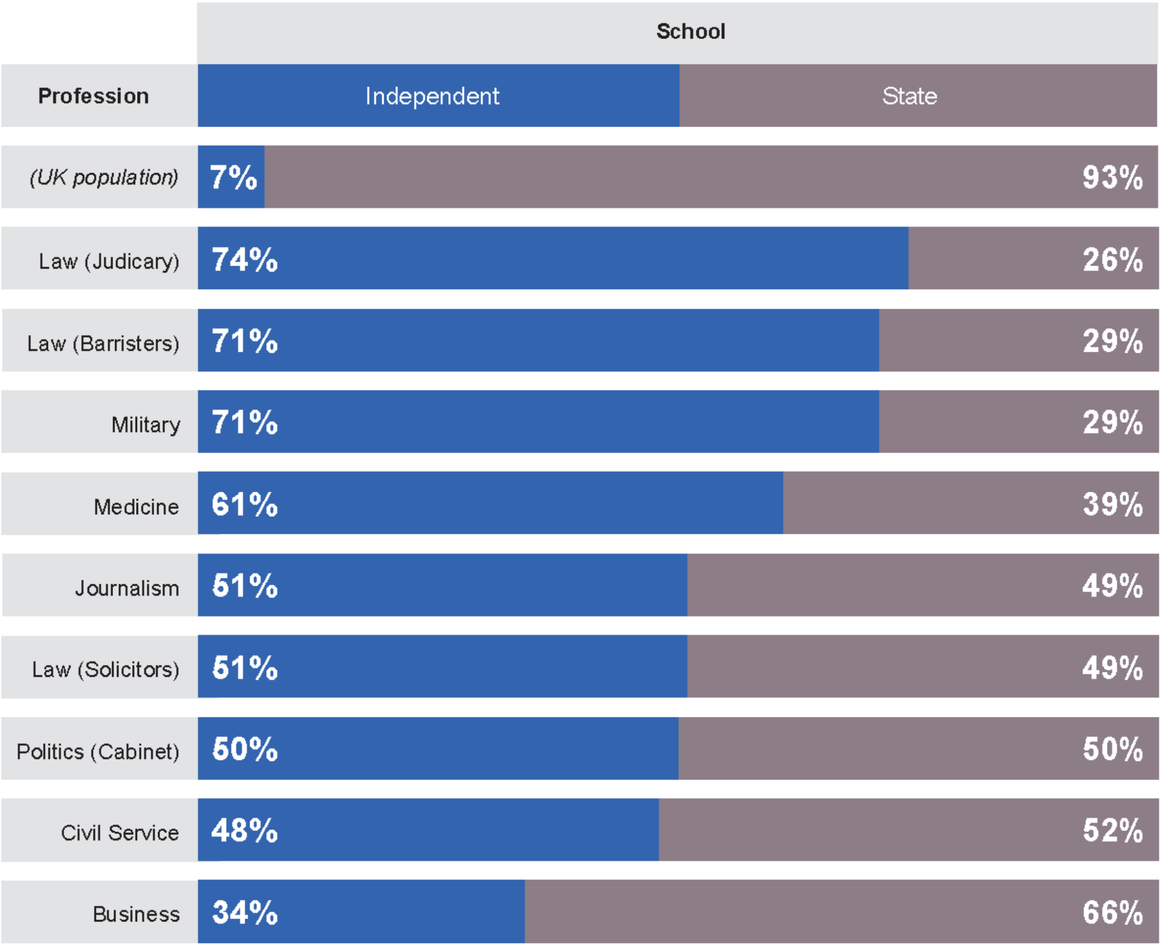


Source: Kirby, Sutton Trust, 2016, p. 4

Further extrapolation reveals the distinctions between those who were Oxbridge educated and those who were not (Figure 34). In the UK, less than 1% of individuals attended either the Universities of Oxford or Cambridge; however, 78% of the elite barristers, 74% of the elite judiciary, 47% of the political elite and 31% of the business elite all were Oxbridge educated.

There seems to be a cyclical nature to this educational pedigree, whereby individuals who come from a lineage of private education are also privately educated, thus securing positions as elites in law, politics and business, and in turn selecting staff and appointees from the same educational pathway as themselves, solidifying the over-representativeness demonstrated above. The report *Elitist Britain* published by the Social Mobility and Child Poverty Commission (2014) uncovers similar findings and cautions that the non-representative educational backgrounds of these elites threatens their ability to adequately represent a large swathe of Britons in the realms of law, politics and business. Sir John Major, Prime Minister David Cameron, Ed Miliband MP, and Nick Clegg MP all have called for increased scrutiny on the educational make-up of parliament and the judiciary in the UK. *Elitist Britain* found the commonplace occurrence of Oxbridge and private school alumni in positions of high influence and power to be a form of 'social engineering' (2014, p. 10). The report demonstrates concern for this finding because 'a lack of diversity in the people who run the country is a problem in and of itself'; 'a narrow elite suggests serious limits on adult social mobility'; and 'the sheer scale of the dominance of certain backgrounds raises questions about the degree to which the composition of the elite reflects merit' (2014, p. 16). Later in this review, we further discuss the negative repercussions of a government made up of and responsive to a wealthy donor-elite class.

Figure 34: Share of professions who attended Oxbridge



Source: Kirby, Sutton Trust, 2016, p. 4

Political representation

Iversen and Soskice (2006) show that the electoral system in which individuals cast their votes plays a key role in shaping political parties, the composition of governing coalitions and – most importantly – the likelihood of redistribution. ‘To explain redistributive policies under democracy, it is essential to understand that policies are multidimensional and that groups have to form partisan coalitions to govern’ (Iversen and Soskice, 2006, p. 178). The model developed by Iversen and Soskice, unlike that of Meltzer and Richard (1981), assumes that there is nothing preventing low-income individuals from taking from the middle class, or the middle class taking from the wealthy. They claim that the middle class – ‘which tends to decide who governs’ – has an incentive to ally with low-income individuals and to exploit the wealthy, but also an incentive to support the wealthy and avoid being exploited altogether (Iversen and Soskice, 2006, p. 178). Their study of electoral systems and redistribution reveals:

> *‘In a majoritarian two-party system, the latter motive dominates because the middle-class cannot be sure that the poor will not set policies in a center-left leadership party. In a PR [proportional representation] system with three representative parties … the first motive dominates because the middle-class party can make sure that a coalition with the left party will not deviate from pursuing their common interest in taxing and redistributing from the rich. The center-right governments therefore tend to dominate in majoritarian systems, whereas the center-left governments tend to dominate in PR systems.*
>
> (Iversen and Soskice, 2006, p. 178)

Table 9 below represents the two particular electoral systems and the number of years with either a left or a right government between 1945 and 1998.

Table 9: Relationship between electoral system and left/right government dominance

	Government partisanship		
Electoral system	**Left**	**Right**	**Proportion of right governments**
Proportional	342	100	0.26
	(8)	(1)	
Majoritarian	86	256	0.75
	(0)	(8)	

Source: Iversen and Soskice, 2006, p. 166

Note: Excludes centrist governments

In addition to their argument implying that centre-left governments are more frequent under proportional representation (PR) systems and centre-right governments under majoritarian systems, Iversen and Soskice also find that PR systems in advanced democracies redistribute more than majoritarian systems (2006, p. 165).

> *"[I]n a two-party majoritarian system the center-right party is more likely to win government power, and redistribute less, than in a multiparty PR system where the center party is more likely to ally with parties to its left. The intuition is that in a majoritarian system where parties cannot fully commit, the median voter faces low taxes if a center-right party deviates to the right if elected, but faces high taxes and redistribution to low income groups if a center-left party in government deviates to the left. With PR, on the other hand, the middleclass party has an incentive to form a coalition with the left party because they can together 'exploit' the rich."*
>
> (Iversen and Soskice, 2006, p. 166)

The intuition behind these results of Iversen and Soskice is that middle classes either ally with low-income groups 'for the purpose of soaking the rich (and splitting the booty) or ally with the rich for the purpose of avoiding being soaked by the poor' (p. 167). The type of electoral system depends on the type of coalition that is likely to emerge and thus determines the level of democratic redistribution. Kang and Powell arrive at a complementary conclusion, that the left orientation of citizens under PR systems can account for part of the systematically greater welfare spending in PR systems than in majoritarian systems (2010, p. 1027).

Political economy and legal frameworks

The United Kingdom's Equality Act of 2010 was set forth with the premise that it is the role of the legal system to, among other things, have regard for reducing socio-economic inequalities, harmonise equality law, and increase equality of opportunity. This particular piece of legislation – coupled with the role of courts, magistrates, tribunals, and local legal authorities – provides a system in which British citizens can actively pursue justice and equality. This section of the review addresses the legal underpinning of financial and economic behaviour in the United Kingdom.

The practice of wealthy individuals and multinational corporations utilising tax havens and sophisticated organisational methods to reduce their tax burdens is not a new phenomenon, but it is increasingly coming under heightened scrutiny. Oxfam (2016) found that tax havens are harbouring an estimated $7.6 trillion of individual wealth, which is 'more than the combined gross domestic product (GDP) of the UK and Germany.'

Thomas Piketty writes, 'This is perfectly legal and not inherently problematic. Nevertheless, it does present a challenge to the tax system' (2014, pp. 524–5). For example, lower income countries are particularly affected by tax havens, which cost them at minimum $170bn in lost tax revenue annually (Oxfam, 2016). Piketty goes further in saying that, even if tax rates are raised to historic levels of 50% or even 98%, if individuals and corporations are able to legally game the system and reveal only 1% or 10% of their true income, nothing can be accomplished in the short or long terms (2014, pp. 524–5). Given that between 2001 and 2014, 'corporate investment in tax havens quadrupled' and currently '9 out of 10 of the world's top 200 companies have a presence in at least one tax haven', Piketty makes a point steeped in reality (Oxfam, 2016).

According to Hsu (2015), an economic effect such as a reduction in government revenue due to shifting of private revenues from one country to another can be traced to a 'conscious policy decision, which in turn can be traced to a legal rule or institution' (p. 2049). Some legal scholars argue that, when it comes to explanations of inequality, 'it is almost surely a greater question of law than economics' (Hsu, 2015, p. 2049), in that the legal institutions which implicitly condone a particular behaviour, due to lax or absent regulation, to a large part determine inequality generating behaviour. Economic markets are established and constrained through legal regulations instituted by governments; therefore, extrapolating from Hsu's (2015) quote, the law sets in motion the ability of markets to generate economic inequality from the beginning and thus are of great importance in understanding how to reduce these trends. The next question begged is then, 'who has access to shaping these legal frameworks which so profoundly shape inequality outcomes?' The answer, rarely-to-never, is low-income, low-educated, and/or disconnected individuals. Wealthy individuals, in order to maintain their wealth and social position, use their money and influence to tilt legal and financial policy decisions in their favour:

> *'… [W]ealthy people are constantly coming up with new and ever more sophisticated legal structures to house their fortunes. Trust funds, foundations, and the like often serve to void taxes, but they also constrain the freedom of future generations to do as they please with the associated assets.'*
>
> (Piketty, 2014, p. 451)

Even when redistributional mechanisms are set in place by governments, '…it may be that the rich use the political machinery more effectively or are able to escape the transfer state through tax evasion so redistribution may not run simply from rich to poor' (Borck, 2007, p. 105).

Although the most vulnerable citizens often do not have the access needed to re-work legal frameworks, Piketty (2014) argues stable legal frameworks play an important role in the diffusion of knowledge which is central to reducing inequality: '..the poor catch up with the rich to the extent that they achieve the same level of knowledge know-how, skill, and education, not by becoming the properties of the wealthy.' (p. 71). Economic actors, he argues, require stable legal frameworks to reliably count on when planning large-scale investments in either education or training within a country (p. 71). Other scholars such as Caron (2015) call for the utilisation of the law as a tool with which governments can combat 'Gatsby-level inequality' (p. 2083). Citing Piketty's 'pioneering work' as an impetus for 'deploying the tax system', Caron argues that increasing the tax burden on the wealthy via higher rates or fewer loopholes is an acceptable use of the legal system to redistribute wealth (p. 2083).

The legal system can be deployed to curb some of these increases in inequality seen in the United Kingdom, as well as to serve as an explanatory measure for how inequality skyrocketed in the financial services industry. McKnight, Duque and Rucci (2016) document some of these legal frameworks in their evidence review for the European Commission's DG for Employment, Social Affairs and Inclusion. They highlight that the erosion of corporate governance has contributed to increases in CEO compensation due to control having been captured by high-level managers, thus allowing managers to freely set their own pay or have it set by similarly paid peers (p. 50).

In response to this phenomenon, Atkinson (2015) favours a legal structure that limits top earnings through adopting maximum pay multiples, which would tie pay to work of equal value. Other proposed policies have been curbs on bankers' bonuses and the creation of pay review bodies for CEOs and top executives. In 2014, the European Union introduced the Capital

Requirements Directive IV, which, among other things, included new rules on corporate remuneration and governance. The new regulations are included below:

- A capped ratio on the fixed and variable component of remuneration at a ratio of 1:1 or 2:1 with shareholder approval. This cap applies to staff whose activities have a material impact on the risk profile of the institution in which they work.
- 50% of any variable remuneration to be in the form of share-based awards.
- At least 40% of variable remuneration to be deferred for not less than 3–5 years to align incentives with the longer term interests of the institution.
- Strengthening of malus and clawback arrangements.
- Additional disclosure and transparency requirements for individuals earning more than €1m per year.

Legal challenges to these regulations have arisen, the most notable being the UK government's legal challenge in the European Court of Justice, which was later withdrawn (McKnight, Duque and Rucci, 2016, p. 50). In lieu of a legal challenge, the UK, France, Ireland, Luxembourg and the Netherlands have refused to implement the bonus cap on smaller financial institutions, or to draw attention to the murky interpretation of these regulations on non-EU foreign subsidiaries (McKnight, Duque and Rucci, 2016, p. 51).

Given the UK's current pending status with the European Union post-Brexit, scholars and policy experts are discussing how the UK will approach the issue of tax cuts for multinational companies if its tax system is no longer under European Union regulation. According to Bergin (2016), compared with other OECD countries with corporate tax rates at 25%, 'the UK is already in the process of cutting its corporate tax rate to 17%.' If Brexit does indeed result in the UK transitioning to a tax-haven-type economy, this could have serious implications for renegotiating legal regulations, reducing the inequality gap, and addressing poverty rates in the UK. Time will demonstrate exactly how these issues are flushed out; however, they remain a clear example of how legal frameworks create environments in which inequality can manifest, as well as legal responses to said inequality.

Voting: a requirement?

Long steeped in standard political economic theory is the idea that inequality should be partially self-correcting in a democracy due to expected patterns of voting of citizens. The 'canonical model' of Meltzer and Richard (1981), known as Median Voter Theory (MVT), assumes that increased inequality (median incomes falling relative to mean incomes) leads the median voter to vote for a candidate or policy that supports increased redistribution. So, in theory, this democratic observation should reduce after-tax, post-transfer inequality. One basic assumption of MVT is that governments are majoritarian, where one person equates to one vote, and that the voting populous is at *full* participation (Bonica *et al*., 2013, p.103). However, the critiques of MVT emerge when discussions turn to the likelihood or occurrence of full voter participation. For example, inequality in income and education play a major role in influencing who actually votes. Those with lower incomes are less likely to exercise their right to vote; therein, the political system is then less responsive to their concerns – often seen as a rise in inequality (Bonica *et al*., 2013, p. 110). Schlozman, Verba and Brady (2012) show that all forms of political participation, save protesting, are significantly skewed socio-economically in favour of top incomes. This unequal turnout, in relation to MVT, creates a situation in which the 'pivotal voter under majority rule may have income greater than the median' and be less likely to vote for policies or candidates in favour of redistribution; or put another way, '…as the 1% get relatively richer, they turn against redistribution' (Bonica *et al.*, 2013, p. 104). Gilens and Page (2014) utilise a different argument against MVT; in that, they argue that elites drown out the preferences of median voters to a point where 'the preferences of the average American appear to have only a minuscule, near-zero, statistically non-significant impact upon public policy' (p. 575).

The basic premise of democratic participation is that citizens should be able to (co-)decide on the policies that govern them, have equal opportunities to do so, and have equal and free opportunities to voice preferences. Therefore, democratic institutions such as parliaments, local governing authorities, or policy platforms should reflect some degree of responsiveness, ‘i.e. to some extent, people should get what they want’ (Peters, 2015). However, economic inequality plays an important role in voter turnout and in this aforementioned policy responsiveness by democratic institutions. Rosset, Giger and Bernauer (2013) find that economic inequality within a democracy ‘increases the underrepresentation of the poor in terms both partisan and government policy representation’ (pp. 829–30), and that, ‘…systemic economic inequality reinforces political underrepresentation, potentially as a result of varying political opinion on redistribution and/or varying political weight of societal groups (pp. 829–30). Further, they claim that these political and social inequalities are oftentimes self-reinforcing (p. 829). For example, countries with lower levels of voter turnout are more likely to have unequal participation between high income and low income voters and also have a larger gap in policy responsiveness between the rich and the poor (Peters and Ensink, 2014; Peters, 2015). Additionally, countries that have smaller income differentiations and higher turnout (greater than 50%) are more equal in terms of ‘who gets what they want’ – keeping in mind that when preferences do not align, governments tend to follow the preferences of the high-income voters more than the low-income voters (Peters and Ensink, 2014, p. 596; Peters, 2015).

> *‘…[A]mong European countries over the period between 2002 and 2010, there is a difference in responsiveness between the rich and the poor. Whereas the preferences of the rich have a marginal positive effect on policy output, the third poorest segment of the population appeared under-represented.’*
>
> (Peters, 2015; Peters and Ensink, 2014)

Kang and Powell (2010) find that the responsiveness to these left–right preferences of the median voter ‘significantly affect comparative welfare spending’; yet another link to inequality and poverty levels of those at the bottom (p. 1014).

With the findings revealing that higher inequality within countries points to lower voter turnout among low-income individuals, one looks for responses to reduce the former and increase the latter. Three such responses are increased political contestation, the introduction of non-institutionalised forms of participation, and legislating compulsory voting; however, the results of such responses are mixed.

Political contestation is a mechanism that encourages a government to respond to the electorate’s wishes. ‘The harder the competitive struggle for votes and policies, the more likely [officials] are to pander to public preferences and the less opportunity governments have to pursue their own interests’. In terms of responsiveness of government officials, Hobolt and Klemmensen found that rhetorical responsiveness (that of speech-giving) is highest in the Danish system (predominantly of minority governments) and the presidential system of the United States, but low in the majoritarian British system. In terms of effectiveness, responsiveness (that of achievement) ‘is higher in the United States than in the parliamentary systems of Denmark and Britain’ (Hobolt and Klemmensen, 2008, p. 332).

Aside from direct democracy (voting), non-institutionalised forms of political participation are also successful ‘in counterbalancing some traditional sources of inequality among the citizenry’, particularly those of gender and age. Non-institutionalised forms of participation take the form of demonstrating, political consumerism, petition signing, group affiliation, etc. (Marien, Hooghe and Quintelier, 2010, p. 187). The advocacy of these forms of political participation ‘clearly lead to a more inclusive political society’ with women and young people more likely to have their voices heard by organisations and elected officials (Marien *et al.*, 2010, p. 205).

The final possible response to be discussed is compulsory voting; however, results from different parts of the world point to signs that this does not necessarily decrease inequality and drive up participation. Lever (2009) argues that compulsory voting may have negative externalities ‘by distracting politicians and voters from the task of combatting persistent, damaging, and pervasive forms of unfreedom and inequality in our societies'. She writes that it 'is also at odds with the concern for the politically inexperienced and alienated, which itself motivates the case for compulsion' (p. 71). A study by Cepaluni and Hidalgo (2016) in Brazil, the largest country to introduce such a measure, reveals that inequality in turnout is increased. They find that non-monetary penalties for abstention, such as restrictions from state services typically used by the wealthy, affect middle and upper class voters more and drive up their participation disproportionately compared to low-income voters (p. 273). Therefore, the discussion and introduction of compulsory voting must take into account the reaction of different demographics of voters in relation to penalties, as well as the rights of individuals to choose not to associate or participate in such a process.

Power relationships and winner-takes-all politics

Winner-takes-all politics refers to the influence of the organised interests in the process of policy making, which identifies 'the major policy shifts that have bolstered the economic standing of those at the top' (Hacker and Pierson, 2010, pp. 152–3). Through a form of 'organized combat', the gains from productivity growth by those already at the top are facilitated by 'a corresponding capture of political power by the same group' (Hopkin and Shaw, 2015, p. 1; Hacker and Pierson, 2010, p. 154). Political economists Hacker and Pierson (2010) felt compelled to come up with a framework for this phenomenon to redress the lack of political and economic sources that adequately explained rising inequality in the United States, such as globalisation or skill-biased technological change (Hopkin and Shaw, 2015, p. 1; Hacker and Pierson, 2010, p. 153). Their winner-takes-all model helps to incorporate a rising concentration of income at the top of the economic ladder, the profound role of government policy in the accumulation of that income, and the dramatic long-term transformation of the American landscape (Hacker and Pierson, 2010, p. 152). Hacker and Pierson point to the revelations of the last decade which have left many individuals feeling as though a rigged system 'has allowed privileged insiders to make fortunes while shifting the negative effects of their activities onto the broader public' (2010, p. 153). Gilens and Page (2014) refer to this phenomenon whereby corporations, business associations and professional groups predominate in the form of 'biased pluralism' (p. 564) and claim that Hacker and Pierson's findings which emphasise the power of the financial industry are a contribution to the biased pluralism literature (p. 567).

Hacker and Pierson's analysis points to four core areas of public policy in the United States which have turned winner-takes-all politics into loser-takes-all inequality: financial markets, corporate governance, industrial relations and taxation (2010, p. 154), all of which, they claim, have been powerfully driven by well-organised elites.

> *'…[T]he American political economy is an organized space, with extensive government policies shaping markets, and increasingly powerful groups who favor winner-take-all outcomes playing a critical role in politics'.*
>
> (Hacker and Pierson, 2010, p. 197)

While Hacker and Pierson make this observation in the United States, political economists Hopkin and Shaw come to similar conclusions for the United Kingdom, though using different rationale. Hopkin and Shaw argue that the 'Thatcherite reforms of the 1980s entrenched the structural power of wealthy groups while weakening organized labour, ensuring that an ever growing share of economic resources flowed to the top' (2015, pp. 1–2). Therefore, their analysis relies less heavily on the lobbying power of wealthy groups and more on the structural features of the British economy that were bent decades before, such as a heavy reliance on the financial sector in London, based on low taxes, low regulation, and large public subsidies to banks (Hopkin and Shaw, 2015, pp. 1–2, 20). This is a more nuanced account of how elites can manipulate democracy over a longer period of time, one which spans both Conservative and Labour governments (Hopkin and Shaw, 2015, p. 3).

There is also evidence that, although the least advantaged were not to blame for the financial crisis, they have disproportionately borne the cost of the cuts to government expenditure (both in terms of cuts to cash transfers and public services); this can be viewed as ‘loser-takes-all’ poverty and inequality. Bank of England research show that large falls in expenditure among highly indebted households following the financial crisis increased the depth and length of the economic recession and contributed to the sluggish nature of the recovery (Bunn and Rostom, 2014). The marginal propensity to consume out of current income is lower among higher income families and therefore, until the incomes of lower income families recover, there will be limits to a consumption-led recovery. Also, as Adair Turner points out: concentration of income and wealth, coupled with a financial system pursuing shorter term rewards, can result in a concentration of investments in unproductive assets (housing, financial products) (Turner, 2016). This limits a productivity-led recovery. A more equal society can create a stronger, more balanced, more stable economy moving forward.

8 CONCLUDING REMARKS

In the UK, economic inequality is high by international standards. Although the main increase in relative income inequality occurred over the 1980s, some aspects of inequality have continued to increase, such as the concentration of income among a small proportion of individuals at the top of the distribution. International evidence shows that this is a feature of Anglo-Saxon countries, and is associated with the size of the financial services sector and the rise of what Thomas Piketty calls super-managers and super-salaries. Inequality has so far not increased in the way many experts anticipated over the recent economic downturn, particularly given falling levels of wages and incomes for many households. This can, in part, be explained by the initial protection of cash benefit values in the first year or two of the recession, the protection of pensioner income through the ‘triple-lock’, falling earnings disproportionately affecting the top of the distribution and strong employment figures. The most recent data suggest that income inequality is on the rise again and is projected to rise further over the next five years.

Although relative measures of wealth inequality show falls in the decade that preceded the economic downturn, driven by a house price boom and increases in home ownership benefiting households with modest levels of wealth, in recent years wealth inequality has increased. This seems to be driven by an accumulation of wealth at the top of the distribution and younger households being priced out of the housing market due to a combination of falling real incomes, house price inflation and limited access to credit. A generational divide has opened up, which may diminish once the economy recovers, or be moderated by the transfer of assets between generations either in the form of inter vivos or inheritance.

Income poverty rates have declined somewhat from the peak levels observed in the early 1990s, and fell further over the economic downturn. This was due to falling real incomes, falling median incomes reducing the poverty line, the ‘triple-lock’ improving pensioners’ relative incomes and cash transfers protecting, to some extent, the incomes of households at the bottom of the distribution. The most recent estimates (2015/16) show that relative income poverty rates are rising again. The long-term decline in absolute income poverty rates had already faltered before the financial crisis, which may, in part, be linked to falling wages. In some years since the financial crisis absolute income poverty rates increased. Another change that has been exacerbated by recent trends has been the widening of the gap between income poverty rates (relative and absolute measures) before- and after-housing costs have been taken into account. The rise in the relative costs of housing for low-income families has meant that poverty rates measured after-housing costs are considerably higher than rates measured before-housing costs. We also observe a similar divergence in income inequality between these two measures of income.

Although individual level wage and earnings inequalities have only increased modestly in the last decade relative to the large increases observed in the 1980s, the share of working age individuals living in low-income households in which at least one adult is in work has increased. In the last few years, more than half of all working age adults living in low-income households are living in working households. This does not mean that the risk of poverty is higher in working households, workless households are still at considerably higher risk of being poor, but it does reflect the fact that income from employment is not sufficient to lift household income above the poverty line for many. This is due to a combination of low pay, low working hours, household composition, changes to the cash transfer system and rising housing costs.

Having summarised trends at the UK level, we review the evidence on the considerable spatial inequalities that exist throughout the UK. These inequalities do not just exist between England, Scotland, Wales and Northern Ireland but also between and within much smaller spatial units.

The empirical evidence on the relationship between income inequality and relative income poverty points to a positive relationship between the two: poverty rates tend to be higher when income inequality is higher.

We reviewed the existing literature to understand what factors may be behind the observed relationship between economic inequality and poverty. To keep the review to a manageable scale, in agreement with Oxfam we focus on a number of specific areas.

Evidence shows that the vast majority of Britons consider that income inequality is too high, and many believe that the government should do more in terms of redistributing income from the well-off to the less well-off. However, evidence shows that people underestimate the true level of inequality and overestimate rates of social mobility. This may well be linked to spatial segregation, and suggests that simply better informing the UK electorate of the true level of economic inequality in the UK should lead to greater pressure being put on governments to tackle inequality.

Economic inequality appears to have quite profound effects on the political economy. Greater concentrations of income and wealth have been linked to the emergence of a powerful elite who put pressure on governments to shape policies in their favour (e.g., limiting curbs on executive pay, limiting tax liabilities, cuts to the welfare state, a particular form of austerity). One consequence of this is a steepening social gradient in voter turnout and mainstream political parties that focus on wooing 'the median voter' who now has above-median levels of income. Another is the potential for growth in populist political parties with narrow interests targeting disenfranchised members of society.

There is a growing body of evidence to suggest that high and rising economic inequality is harmful for growth, and that tackling poverty is not enough to reduce these disparities. Tackling inequality through redistribution may not be the only solution, but evidence suggests that redistribution is not damaging for economic growth. Experts are optimistic about the role that policy can play to both curb increasing rates of inequality and poverty and to bring rates down. The Equality Act 2010 and the equality agenda more broadly are important elements, but it is clearly possible to reduce inequalities between population groups (e.g., by equalising poverty rates or pay between genders or ethnic groups) without reducing overall inequality and poverty, and this means that an equality agenda needs to be combined with an anti-poverty strategy and a focus on reducing overall economic inequality.

There seems to be a greater appetite for tackling inequality and poverty in the devolved administrations of the UK than we have seen in the UK government since 2010, and with pressure being put on domestic governments as a result of the recently agreed UN Sustainable Development Goals there is a real prospect for action. Of the 17 UN Sustainable Development Goals, one is specifically focused on reducing income inequality (including a target to increase the real incomes of the lowest 40% at a rate higher than the national average) and another is to reduce poverty in all forms everywhere. These goals are defined in terms of reducing income inequality and poverty both between but also within all countries (rich and poor). There seems to be a real appetite and opportunity to create a fairer society, with the gains from future growth being shared more equally.

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NOTES

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2 A wide-ranging public consultation argued strongly in favour of keeping income poverty at the heart of the government’s measure of child poverty – see Stewart and Roberts (2016).

3 http://www.gov.scot/Topics/People/fairerscotland/tacklingpovertyinscotland/CP/MeasureFW

4 http://gov.wales/docs/dsjlg/publications/socialjustice/120625tackpovplanen.pdf

5 http://gov.wales/docs/dsjlg/publications/150327-child-poverty-strategy-walesv2-en.pdf

6 http://www.belfasttelegraph.co.uk/news/northern-ireland/stormont-executive-has-failed-to-develop-an-antipoverty-strategy-for-northern-ireland-judge-rules-31340442.html

7 http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/news-parliament-2015/sustainable-development-goals-in-the-uk-inquiry-launch-16-17/

8 https://sustainabledevelopment.un.org/?menu=1300

9 https://www.equalityhumanrights.com/en/equality-measurement-framework

10 There are a few studies that have sought to examine the distribution of personal income in the UK – see, for example, Karagiannaki and Platt (2015).

11 Set out on their website http://www.gov.scot/About/Performance/scotPerforms

12 More detail can be found in the technical note https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200717/technical_note_20110307.pdf

13 http://www.ophi.org.uk/research/multidimensional-poverty/

14 A separate series is produced by DWP and published by the Scottish government ‘Poverty and Income Inequality in Scotland’ (2014/15 series published in June 2016 http://www.gov.scot/Publications/2016/06/3468) which contains annual observations with confidence intervals.

15 Thanks to Facundo Alveredo (WWID) for not only updating the UK series for us but for highlighting how changes in top tax rates shaped the trends in top income shares post 2009.

16 https://www.equalityhumanrights.com/en/britain-fairer-report/supporting-evidence

17 https://www.equalityhumanrights.com/en/britain-fairer/britain-fairer-report

18 Pre-distribution policies describe those which shape the distribution of market income or the position of individuals within this distribution. For example, education and training policies play an important role in determining individuals’ earning potential and child care provision can help parents, particularly mothers, find work and progress in the labour market.

19 A ‘poverty trap’ describes the situation where an increase in someone's income is offset by a consequent loss of state benefits, leaving them no better off and, therefore, unable to escape poverty.

20 An individual or household can be described as being ‘near poverty’ when their income is close to, but not below, the poverty threshold.

21 James Heckman outlines the arguments for pre-distribution in this essay http://bostonreview.net/forum/promoting-social-mobility-james-heckman

22 Original BBC source: http://worldpublicopinion.net/widespread-unease-about-economy-and-globalization-global-poll/

23 https://www.youtube.com/watch?v=QPKKQnijnsM

24 https://www.youtube.com/watch?v=aOJ93tAbPP0

25 https://www.youtube.com/watch?v=tvN8zvovDrY

26 Many have argued that the Barnett formula is flawed because, among other things, it doesn’t take into account differences in need. In addition, the way the Barnet formula interacts with devolution of tax raising powers puts the devolved administrations in a more advantaged position (Phillips, 2014).

27 However, although there is an argument for accounting for commuters in these statistics, the result is that they are double-counted as both residents in one region and commuters in another. An argument could also be made for factoring in overseas visitors.

28 https://www.opendemocracy.net/openglobalrights/juan-pablo-bohoslavsky/vicious-spiral-of-economic-inequality-and-financial-crises.

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