what do we know and what should we do about...?

inequality

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Inequality is bad and getting worse. (Angel Gurría, Secretary-General of the Organisation for Economic Co-operation and Development (OECD))

Last year 26 people owned the same as the 3.8 billion people who make up the poorest half of humanity. (Oxfam)

Top UK CEOs earn annual wage of average worker in 2½ days. (Financial Times, 4 January 2019)

Reducing excessive inequality ... is not just morally and politically correct, but it is good economics. (Christine Lagarde, Managing Director, International Monetary Fund)

Never before have economic inequalities been so high up the news agenda. Not only campaigning organisations like Oxfam but also staid, sober, international organisations like the OECD say that inequality is too high. Inequality is said to be one of the reasons that the UK voted for Brexit, and the United States elected Donald Trump as President. The economist Thomas Piketty toured the chat shows in 2014 with a book that analysed the causes of inequality; The Economist magazine in 2018 published a cartoon mocking the very rich (see Figure 1.1). And mainstream politicians in the United States are now advocating wealth taxes and new high rates of income tax.

Concern is high now partly because economic inequality is at historically high levels. The OECD says that income inequality in developed countries is at its highest level for the past half century. The combination
Figure 1.1


Note: 'Inbalance' in original.
of low growth and rising inequality has meant that, between 1980 and 2014, the richest 10% of adults in the United States captured 55% of the economic gains. We also know more about how much inequality there is thanks to many researchers’ hard work in uncovering and processing new sources of data. This has given us estimates from many countries over many years of the fraction of national income that goes to the very rich, and of how unequally distributed household wealth is.

But there is also an increasing amount of academic research on the apparently harmful impacts of inequality. Unequal societies seem to be less healthy, less trusting, and tend to have more crime and violence. Many economists now recognise that a high level of inequality is not a natural, and certainly not a necessary, consequence of a vibrant economy; instead, key international organisations are worried that inequality is a drag on economic growth. We used to hope that, if there were some in society who had a lot less than others, then maybe this would be just a short-term blip, or that people could improve their lot with hard work and effort. We now know that a great deal of income mobility is short range and that, far from living in a world where all young people have equal chance to shine, where people end up in society is heavily influenced by where they started from. Indeed, there is a suggestion that high levels of inequality reduce social mobility, perpetuating divisions between families that have and those that have not (a society with lots of social mobility would be one where everyone has a similar chance of rising to the top, or falling to the bottom, or at least where that chance does not depend on their family background). And there is a fear – as set out by economists Joseph Stiglitz and Thomas Piketty – that these processes, combined with the way that economic inequalities affect our political debates, mean that the world will soon see economies with the sorts of gaps between the elites and the masses last seen in the early twentieth century. That would be profoundly undemocratic, and most definitely unfair.

In this book, I set out what is known about economic inequalities in the UK, or the differences in people’s earnings, their disposable income and their wealth (I will define these precisely later), and I summarise what the academic literature says about the causes and consequences of high levels of inequality. Some might think that there is nothing wrong with some people being very well off, so long as their riches are deserved through hard work, effort or skill. My view is that inequality in the UK is too high, that too much of it represents inequalities in opportunities, and that we
would all benefit if we could become a little more equal. That view is based on the evidence presented in this book – although not all of it is definitive, and these are ongoing areas of academic enquiry – but it also reflects my expert judgement after 21 years of implementing, studying or advising on social policy and social inequalities. With that in mind, I will also set out what could be done to move the UK off its high-inequality path.

Inequality in what?

What are economic inequalities?

This book will look at economic inequalities, that is the differences in people’s earnings, their disposable income and their wealth. These three terms all have precise meanings and it will be good to be clear about them now.

Earnings – or pay, wages or salary – are what people in work are paid by their employer. For many people, earnings are their main, or only, source of income (across all people in the UK, 58% of our disposable income comes from earnings (after deducting taxes); see Figure 1.3 below).

In this book, I use the word income to refer to all the different sources of money that are coming into a household. As well as the earnings from employers, people can receive money from their own business or from being self-employed, or investment income from financial assets (such as interest on bank accounts, or dividend payouts on shares), or other sorts of income from other sorts of assets (buy-to-let investors get rental income, for example). Households may also receive money from the government in social security benefits or tax credits, such as the state pension or child benefit. Having received these different sources of income, most of us will have to pay taxes on some of that: what is left is disposable income. In Chapter 3, most of the discussion about income inequality refers to this concept of disposable income; the exception is when I look at the share of income going to the very rich, which measures income before deducting taxes.

My wealth is the value of all the physical belongings that I own (less any debts I owe), plus the value of any financial assets, like money in a bank account, shares or a pension fund. Income and wealth are two very different things. It is possible to have a high income but no wealth, and one can be very wealthy but have little income (like the tropes of the impoverished landowners of the early twentieth century, or elderly widows in large,
impossible-to-heat houses). But income and wealth are usually related. If I have a low income, then that it is going to make it hard for me to generate much wealth of my own, and most forms of wealth do produce an income of some form, or can be sold and the money invested in assets that do produce income. And I will show in Chapter 3 that wealthy people in the UK tend also to have high incomes, and vice versa.

The distribution of income in the UK

The key facts on income inequality in the UK come from data collected by government statisticians. Every year, they ask tens of thousands of adults to tell them about their income (this is not easy: people usually do not like talking about their income, but if they ever call on you, please remember that my research depends on people sharing details of their lives with strangers). To turn the answers to these questions into a single number of ‘income’, statisticians decide over what period to measure income, whose income to measure, and what counts and does not count as income. There are several points about the definition used that you need to know (for more detail, see mikebrewereconomics.com/WDWK). First, the measure of income misses out on many things which can be important in determining your overall standard of living, such as what you are able to do when you are not at work, how much you benefit from free public services, and whether you own your own house (government statisticians do use another measure of income – known as ‘income after housing costs’ – where what is spent on housing is deducted from income, but this does not accurately reflect the savings that people can make if they own their own house, and in this book I always use the conventional ‘before housing costs’ measure). Second, we add up all the income of people living in the same household; this means that we cannot look at inequalities between (say) men and women in the same household. Third, income is measured over a short period of time – the last few weeks, more or less – and expressed in a weekly amount (alternatives would be to measure annual income, or even income over a lifetime). Finally, we measure income at a point in time. In general, I am less concerned about income inequality if individuals are moving about the income distribution from year to year, so that those who are well off now are likely to be poor later on. However, we know that, although incomes do change, the vast majority of moves are short-distance.
Figure 1.2 The distribution of income in the UK, 2016-17

Source: Based on data underpinning Figure 2.1 in Cribb et al. (2018)
Figure 1.2 shows the income distribution in the UK in 2016–17 (data for 2017–18 was released in March 2019, too late to be fully incorporated in this book). Each bar represents a band of income £10 a week wide, and the height of the bar shows how many people have that much income. Here, ‘income’ has been added up across all members of a household and adjusted by the number of adults and children living in the household. A lot of people are clumped together towards the bottom of the income distribution – around £300 to £400 a week – and a few people have high incomes that stretch out towards the right. At the very right of the figure, you can see the people whose income goes ‘off the scale’: there are more than 1.5 million in this bar, or about 2% of the population. It also seems to be the case that there are 600,000 people with no income at all. This would be alarming if true, but the consensus is that many of these do really have some income but have not reported it to the survey. The mathematical average income in 2016–17 – that is, ‘average’ in the sense of ‘add up everyone’s income and share it out equally’ – was £594 a week, considerably higher than the median income of £494. The fact that these are different reflects that some people in the UK have very high incomes. The figure also marks with alternate black and white shading what are called the decile groups: each of these groups contains 10% of the population.

It is also helpful to understand the different ways in which households in different parts of the income distribution get their income. Figure 1.3 shows what fraction of income comes from the four main sources, calculated separately for each decile group of the income distribution. Overall, 58% of household disposable income comes from (after tax) earnings from employment (as an employee of a company or charity or public sector body), 17% from social security benefits and tax credits, 11% savings, investments and people’s private pension (payments of the basic state pension are counted in ‘social security benefits or tax credits’), and 10% is income (after tax) from self-employment earnings or profits. Earnings become more important as a source of income as we move up the income distribution from poorest to richest (other than the very top, where there is a lot of income from self-employment), as does income from savings (although there is also a lot of income from savings at the very bottom of the income distribution). Income from social security benefits becomes more important as we move down the income distribution.
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Figure 1.3 Sources of income across the UK income distribution, 2016–17

Source: Based on analysis provided by the Institute for Fiscal Studies of ‘Households Below Average Income’ data

Inequality of outcomes or inequality of opportunity?

There is an argument that we do not need to care about inequalities in outcomes, like income or wealth, provided that we live in a world where everyone has an equal opportunity to be rich or poor. The idea is that our economic outcomes reflect the choices that we make, and it is right for us to face the consequences of those choices. But outcomes are also shaped by opportunities, and the extent of our opportunities are limited
(or expanded) by our family, our employers, institutions, the current state of the economy, and so on, and are ever-changing. In a society where we cared only about equality of opportunities, would we give extra assistance to those who developed a longstanding illness? What about to someone whose employer went bankrupt because of competition from China? Or because of a fraudulent finance director? Would we help those whose opportunities are reduced because they are caring for children, or elderly parents, or whose marriage has broken down? In practice, identifying which unequal outcomes reflect unequal opportunities and which different choices is almost impossible. We can also argue that our opportunities to thrive as a citizen or to exercise our rights are inevitably constrained by our economic resources. More worryingly, it seems that the more unequal outcomes are now, the more unequal opportunities will become in the future, thanks to how parents strive for the best for their children, and how our democracies and politics seem to work (I discuss this more in the next chapter). Equality of outcomes is an excellent goal to strive for – and some of the suggested policy changes in Chapter 5 will help us move towards that – but we also need to care about inequality in outcomes.

Inequality or poverty?

There is also an argument made that we should be focused on relieving or alleviating poverty in the UK, and that we do not need to care about overall inequality. This seemed to be the view of Tony Blair, Prime Minister from 1997 to 2007, who said that ‘I don’t care if there are people who earn a lot of money. They are not my concern. I do care about people who are without opportunity, disadvantaged and poor.’ Of course, this does not have to be an either–or situation: it is possible to think that high rates of poverty and high levels of inequality are both problems we should try to tackle. The arguments that I will present later suggest that inequality is harmful to society over and above the harm that can be caused by living in poverty. They are separate problems, and an anti-poverty strategy would look different from an anti-inequality strategy even if policy makers happily accept that poverty, like inequality, is a relative concept. But there are strong links: reducing inequality in economic resources and increasing equality of opportunities will make reducing poverty a little easier.
Figure 1.4  A Pen’s Parade for the UK income distribution, 2016–17

Source: Data provided by the Institute for Fiscal Studies, derived from the ‘Households Below Average Income’ data-set
How can we visualise or measure inequality?

When thinking about income inequality, Jan Pen, a Dutch economist working in the 1970s, imagined a parade of people walking, with the poorest at the front and the richest at the back, and their height being proportional to their income, so that the person on average income was the height of an average person. This parade would start with some very short people. After half the people had walked past, we still would not have reached an averagely tall person; some time later, the parade would end with some giants.

Rather than watching actual people parade, we can draw this on a graph, with the height of each bar representing someone’s income. In a perfectly equal society, everyone would have the same income, and the bars would all have the same height. In all real societies, the graph will have bars that get taller and taller as we move to the right.

Figure 1.4 shows Pen’s Parade for the distribution of household income in the UK in 2016–17, but having left out the richest 1% of individuals (over 0.6m people), and having labelled the horizontal axis according to people’s rank in the distribution of income, with the poorest person scoring 0 and the richest person scoring 100, and so on (these are called centiles or percentiles).

This figure also splits the population into 10 equal-sized decile groups. The boundary between the bottom (poorest) and second bottom of these decile groups is the 10th centile of the income distribution: a person at this point in the income distribution is richer than 1 in 10 of the population, but poorer than 9 out of 10. At the other end, someone at the boundary of the top (richest) and next-to-top decile group is at the 90th centile, and they are richer than 90% of the population but poorer than 10%. Reading off the vertical axis, you can see that a person at the 10th centile of the income distribution (on about £250 a week in 2016–17) has about half as much income as Mr or Mrs Average at the 50th centile – the middle of the distribution (on about £494 a week). And Mr or Mrs Average have slightly more than half as much income as someone at the 90th centile (on £962 a week) – that is, someone who is just outside the richest 10% of the population. These figures give us one commonly used measure of inequality, the 90:10 ratio. This is the income of the person at the 90th centile divided by the income of the person at the 10th centile, and the higher the number, the more inequality there is. For the UK in 2016–17,
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this was 3.9 for income (it was 6.3 for the United States, which tends to be top of the inequality league table, and 3.3 for Sweden, which tends to be a very equal country). The 90:10 ratio is easy to explain, and has a practical advantage that it does not use the data on incomes from the very top or bottom of the distribution that are often measured less accurately, or with more uncertainty, than more normal incomes. But its simplicity means that it is a broad-brush measure: a hypothetical inequality-reducing policy that took money from people at the 80th centile and gave it to people at the 20th centile would not change the 90:10 ratio.

Where are the top 1%?

I left the richest 1% out of Figure 1.4 so as to stop the scale on the vertical axis from shooting off the page. The 99th centile of weekly disposable income in 2016–17 was £2,317, which is more than twice (it is actually 2.4 times) the income of the 90th centile, but there were about another 660,000 adults and children in households with incomes above that. I will come back to the experiences of the very rich several times in this book, because of the way they affect measures of inequality, and their influence on the economy and society (and I will also show that the value of the 99th centile quoted above is probably an underestimate of the truth).

Income shares and Lorenz curves

Pen’s Parade lets us visualise inequality, but does not measure it. A useful way to compare income distributions is to think about ‘income shares’, and then to plot these in a variant to Pen’s Parade where people are lined up from the poorest to the richest, and we plot the share of total income that goes to them plus all the people on their left (i.e. who have less income than they do). In an economy where everyone has the same income, the poorest 1% in society will collectively have a total income of exactly 1% of the economy-wide total. But in the UK, the poorest 1% of people, all of whom had less than £16 a week income in 2016–17, are collectively going to have a share of the total UK-wide income that is a lot less than 1%, and the richest 1%, all of whom had at least £2,317 a week in 2016–17, will collectively have a lot more than 1% of the economy-wide income.

In Figure 1.5, I plot these income shares for each centile in the UK income distribution. This produces a curve that starts at zero, initially rises
slowly, but then rises more and more quickly until it reaches 100%. It is called a Lorenz curve, and you can use it to read off income shares. If you start from a point on the horizontal axis, go up until you hit the curve, and then read across to the vertical axis, you can read what fraction of total income goes to the poorest section of the population. In the UK in 2016–17, the poorer 50% got just over 28% of total household income. Or you can start on the vertical axis and read the graph the other way, so you would see (for example) that half of total household income went to (coincidentally) the richest 28% of the UK.

The Lorenz curve is the idea behind one of the most commonly used measures of inequality: the Gini coefficient (or index). The Gini coefficient
measures how close the Lorenz curve (as plotted in Figure 1.5) is to being a straight line (which would correspond to our perfectly equal society). Mathematically, it is the area $A$ divided by the total of area $A$ and area $B$. The more inequality there is, the ‘curvier’ the Lorenz curve will be (i.e. it will start off close to the horizontal axis before rising rapidly to reach 100%). If everyone had the same income the Gini coefficient would be zero as there would be no inequality. If a single person had all the money in the economy and the rest had nothing, then the Gini would be 1. For the UK in 2016–17, the Gini coefficient was 0.337.

The ratio of areas on a graph is a rather abstract measure of inequality. But it turns out that if two random British people bumped into each other, and you then subtracted the poorer person’s income from the richer person’s income, and expressed that as a ratio of the average income in the country, then on average you would expect to get a difference of exactly twice the Gini coefficient. (In other words, the difference in incomes between two random Brits would on average be about $2 \times 0.337$, or 67%, of the national average income, or just under £21,000 a year in 2016–17 in equivalent-£-per-couple-with-no-children. That number will appear to some to be too high. Surely, you might say, if I think of all the people I know, it cannot be the case that the average difference between my income and theirs is £21,000? In reality, that difference probably would be a lot smaller than £21,000 because all the people you know are not a random selection of people from across the income distribution.)

A really important point: most measures of inequality are about living standards relative to other people

When economists talk about inequality, they say that it is a relative concept. What they mean is that the amount of inequality depends on how high my income is relative to other people’s. Imagine the UK redefined its own currency overnight, so instead of using sterling, we used Brewers, where 1 Brewer is valued at £100. This is just a change of labels, and clearly this should have no real impact on our society. Luckily, then, changing from pounds to Brewers will not change any of the measures of inequality that we use: the amount of inequality in a country does not depend on the units used to measure income. That is very sensible.
Now imagine coming back to the UK, still happily measuring income in Brewers, in 20 years’ time. There has been some economic growth, and by a huge coincidence every individual’s income is exactly twice what it was 20 years ago. If this happened, then most measures of inequality still would not have changed. If this seems wrong – perhaps you think that a situation where everyone’s income doubles actually makes things worse, because the gap (in pounds or Brewers) between the richest and the poorest is even more insurmountable – then you will need to find other statistics to monitor alongside the traditional, relative measures of inequality that I use in this book.

**Economic inequalities in the UK in one chart**

Figure 1.6 shows trends over time in the Gini coefficients of individual hourly pay, disposable income and household wealth as well as share of income going to the top 1%.

The key points are that:

- income inequality in the UK was low in the 1960s to early 1980s. It rose rapidly through the 1980s, and has remained at its new higher level ever since (although I will modify this story slightly in Chapter 3 when I focus on what has happened to the super-rich in the UK);
- the fraction of pre-tax income going to the richest 1% of adults rose steadily from the late 1970s to the late 2000s. It fell back after the financial crisis in 2008, but it is rising again and is close to a record high, at just under 15% of income;
- inequality in hourly rates of pay rose throughout the 1980s and 1990s, peaked in the early 2000s, and has fallen since;
- wealth is a lot more unequally distributed than hourly pay or disposable income and, as will be shown in Chapter 3, household wealth in the UK has been growing in importance since the 1970s, driven more by rises in house prices than by active saving.

That rise in income inequality in the 1980s (about 10 percentage points in 15 years) was one of the largest increases seen across developed nations’ economies. Figure 1.7 shows that the UK is now close to the top of the international league table for inequality. The UK has the second
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Figure 1.6  Inequality in income, earnings and wealth in the UK

Sources: Income: Figure 3.7 of Cribb et al. (2018), derived from the ‘Households Below Average Income’ data-set. Earnings: from Box 2 of D’Arcy (2018). Wealth: Table 2.5 of ONS (2018a), Table 2.3 of Hills et al. (2013)

The highest level of inequality among the countries with the seven largest economies (the G7), behind the United States. Elsewhere in Europe, only Lithuania is more unequal. Among the countries highlighted in Figure 1.7 (which include the 36 members of the OECD, which tend to be the richest countries, as well as some newly industrialised countries), those that are more unequal than the UK include China, Brazil, India, Mexico and South Africa.
Figure 1.7  The Gini coefficient across OECD and selected other countries, 2016 or latest year

Source: www.oecd.org/social/soc/IDD-Key-Indicators.xlsx
Researchers also measure income inequality across the world: global inequality, although very high (with a Gini of over 0.7), seems to be falling at the moment. This is because the incomes of many people in some large, developing countries are rising at a faster rate than those in developed countries. On the other hand, the global elite are doing very well, and are seeing some of the highest income growth.\(^{17}\)

Growing inequality is a problem in many developed countries: if the UK could return to the level of inequality it had in the mid-1970s (a Gini of around 0.25), it would find itself as one of the most equal countries in 2016. The fact that income inequality varies so much between countries that are at similar levels of economic development, and that it changed by so much in such a short space of time in the UK in the 1980s, are important clues that the high levels of inequality seen now in the UK are not inevitable.

It is also worth thinking about how much income inequality there would be if people did not have to not pay income tax or national insurance payments, or if people did not receive social security benefits like child benefit, universal credit or the state pension. Unsurprisingly, the gap between the rich and poor would be greater if there were no taxes on income. It would not be much larger, though: the Gini would go up by about 0.03 (remember, it was 0.337 in 2016–17). Social security benefits and tax credits do a lot more to keep inequality down: without them, the Gini would be another 0.11 higher.\(^{18}\)

**The rest of this book**

In Chapter 2, I will set out some of the research from the past two decades on the impact of inequality. It is clear that countries with high levels of inequality have worse health outcomes and greater social problems than more equal societies, and I will discuss the arguments – made by, among others, Richard Wilkinson and Kate Pickett – that these problems are worse because of high levels of inequality. I will set out the evidence that inequality hurts economic performance, and may even have caused the financial crash of 2008 and the subsequent Great Recession. I will show how high levels of inequality seem to make it impossible to have equality of opportunity, because of what parents do to give their children the best chance in life, as summarised very recently by Matthias Doepke...
and Fabrizio Zilibotti. And I will summarise the landmark work of Thomas Piketty, who argued that, left unchecked, the way that wealth accumulates and is bequeathed from generation to generation risks leading to ever-growing inequalities and the emergence of a super-wealthy elite.

In Chapter 3, ‘What do we know about inequality?’, I present the key trends in economic inequality in the UK. I will explain how the UK became so much more unequal during the 1980s, why inequality stopped rising in the 1990s, and how it has been changing since the financial crash in 2008. Given the importance of the very rich in the key theories of why inequality can be harmful, I will zoom in to see what is known about the top 1% in the UK – the 536,000 people with the highest incomes – as well as the top 0.1% and top 0.01%. And I will show that the widely held view that inequality in the UK is not getting worse is based on statistics that conceal a sharp rise in the share of income going to those with the highest incomes, and actually may not be true. I will also look at what we know about the distribution of wealth, where new, better sources of household data show that ownership of wealth is far more widespread than it was a century ago. But there remain enormous differences between those who have little or no (or even negative) wealth and those with, for example, homes that have more than doubled in value in the last 30 years (in real terms) or generous pension pots. And I will assess the relevance to the UK of Thomas Piketty’s prediction that growing wealth inequalities and inheritances are set to return our economies to levels of inequality last seen at the dawn of the twentieth century.

Chapter 4 addresses the challenge of ‘What should we do about inequality?’. My calls for action fall into six areas: towards a fairer labour market; curbing excessive pay at the top; redistributing wealth; providing security and opportunity for all; promoting social mobility; and publishing better analysis about the state of economic inequalities in the UK. Some of the policy responses respond to the facts about economic inequalities as set out in Chapter 3, or attempt to address the causes; others respond to the way that inequalities harm our society, as set out in Chapter 2. Some of these will seem radical, or politically unfeasible. But if those in power want a different outcome, then we can choose different paths, and who can say how politically feasible it will be to have ever-growing divides in society? Finally, a section at the end suggests further reading and gives details of the key data sources and mikebrewereconomics.com/WDWK looks at some of the detailed issues involved in measuring incomes and inequality.
There is much that is missing from a short book like this. There is no space to talk about geographical inequalities in the UK, but it is worrying that they remain stubbornly persistent. There is a new concern in the UK about differences between generations or cohorts, driven by the undeniable fact that the old idea that each generation will be better off than its predecessors has broken down for Millennials (those born after 1980). I will not look at income mobility, or about incomes over the lifetime. I will not talk about other forms of inequality, such as in health, nor about differences between different groups in society – such as between men and women (think of the gender pay gap) – or differences in, say, wealth between those of different ethnic backgrounds. I will not talk about social class, even though, in the UK at least, class is part of the reason why inequalities persist across generations. And I will not look at the link between inequality and politics. The focus of this book is on the UK, but I will show how the UK compares with other developed countries.