

Dysfunctional societies

No man is an Island, entire of itself; every man is a piece of the continent, a part of the main.

John Donne, *Meditation XVII*

The last nine chapters have shown, among the rich developed countries and among the fifty states of the United States, that most of the important health and social problems of the rich world are more common in more unequal societies. In both settings the relationships are too strong to be dismissed as chance findings. The importance of these relationships can scarcely be overestimated. First, the differences between more and less equal societies are large - problems are anything from three times to ten times as common in the more unequal societies. Second, these differences are not differences between high- and low-risk groups within populations which might apply only to a small proportion of the population, or just to the poor. Rather, they are differences between the prevalence of different problems which apply to whole populations.

DYSFUNCTIONAL SOCIETIES

One of the points which emerge from Chapters 4-12 is a tendency for some countries to do well on just about everything and others to do badly. You can predict a country's performance on one outcome from a knowledge of others. If - for instance - a country does badly on health, you can predict with some confidence that it will also



imprison a larger proportion of its population, have more teenage pregnancies, lower literacy scores, more obesity, worse mental health, and so on. Inequality seems to make countries socially dysfunctional across a wide range of outcomes.

Internationally, at the healthy end of the distribution we always seem to find the Scandinavian countries and Japan. At the opposite end, suffering high rates of most of the health and social problems, are usually the USA, Portugal and the UK. The same is true among the fifty states of the USA. Among those that tend to perform well across the board are New Hampshire, Minnesota, North Dakota and Vermont, and among those which do least well are Mississippi, Louisiana and Alabama.

Figure 13.1 summarizes our findings. It is an exact copy of Figure 2.2. It shows again the relationship between inequality and our combined Index of Health and Social Problems. This graph also shows that the relationship is not dependent on any particular group of countries – for instance those at either end of the distribution.

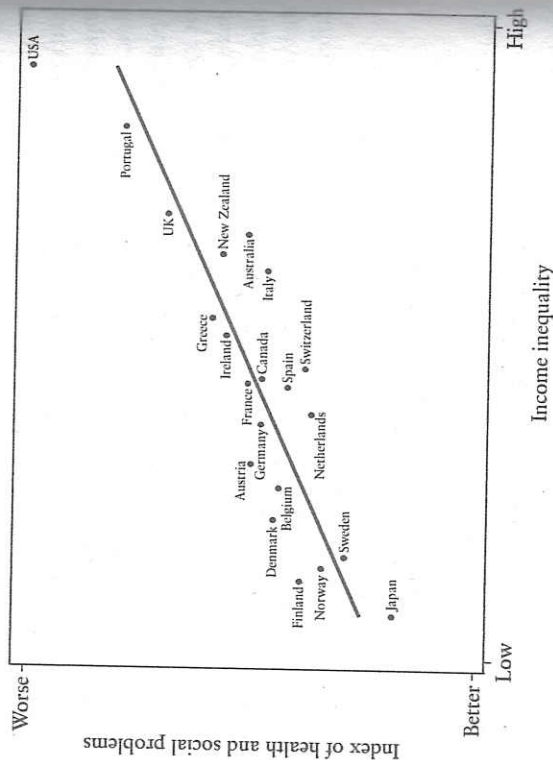


Figure 13.1 Health and social problems are more common in more unequal countries.

Instead it is robust across the range of inequality found in the developed market democracies. Even though we sometimes find less strong relationships among our analyses of the fifty US states, in the international analyses the USA as a whole is just where its inequality would lead us to expect.

Though some countries' figures are presumably more accurate than others, it is clearly important that we do not cherry-pick the data. That is why we have used the same set of inequality data, published by the United Nations, throughout. In the analyses of the American states we have used the US census data as published. However, even if someone had a strong objection to the figures for one or other society, it would clearly not change the overall picture presented in Figure 13.1. The same applies to the figures we use for all the health and social problems. Each set is as provided at source – we take them as published with no ifs or buts.

The only social problem we have encountered which tends to be more common in more equal countries (but not significantly among more equal states in the USA) is, perhaps surprisingly, suicide. The reasons for this are twofold. First, in some countries suicide is not more common lower down the social scale. In Britain a well-defined social gradient has only emerged in recent decades. Second, suicide is often inversely related to homicide. There seems to be something in the psychological cliché that anger sometimes goes in and sometimes goes out: do you blame yourself or others for things that go wrong? In Chapter 3 we noted the rise in the tendency to blame the outside world – defensive narcissism – and the contrasts between the US and Japan. It is notable that in a paper on health in Harlem in New York, suicide was the only cause of death which was less common there than in the rest of the USA.⁸⁰

EVERYONE BENEFITS

A common response to research findings in the social sciences is for people to say they are obvious, and then perhaps to add a little scornfully, that there was no need to do all that expensive work to tell us what we already knew. Very often, however, that sense of knowing

only seeps in with the benefit of hindsight, after research results have been made known. Try asking people to predict the results in advance and it is clear that all sorts of different things can seem perfectly plausible. Having looked at the evidence in the preceding chapters of how inequality is related to the prevalence of so many problems, we hope that most readers will feel the picture makes immediate intuitive sense. Indeed, it may seem obvious that problems associated with relative deprivation should be more common in more unequal societies. However, if you ask people why greater equality reduces these problems, much the most common guess is that it must be because more equal societies have fewer poor people. The assumption is that greater equality helps those at the bottom. As well as being only a minor part of the proper explanation, it is an assumption which reflects our failure to recognize very important processes affecting our lives and the societies we are part of. The truth is that the vast majority of the population is harmed by greater inequality.

One of the clues, and one which we initially found surprising, is just how big the differences between societies are in the rates of the various problems discussed in Chapters 4-12. Across *whole* populations, rates of mental illness are five times higher in the most unequal compared to the least unequal societies. Similarly, in more unequal societies people are five times as likely to be imprisoned, six times as likely to be clinically obese, and murder rates may be many times higher. The reason why these differences are so big is, quite simply, because the effects of inequality are not confined just to the least well-off: instead they affect the vast majority of the population. To take an example, the reason why life expectancy is 4.5 years shorter for the average American than it is for the average Japanese, is not primarily because the poorest 10 per cent of Americans suffer a life expectancy deficit ten times as large (i.e., forty-five years) while the rest of the population does as well as the Japanese. As epidemiologist Michael Marmot frequently points out, you could take away all the health problems of the poor and still leave most of the problem of health inequalities untouched. Or, to look at it another way, even if you take the death rates just of white Americans, they still do worse - as we shall see in a moment - than the populations of most other developed countries.

Comparisons of health in different groups of the population in more and less equal societies show that the benefits of greater equality are very widespread. Most recently, a study in the *Journal of the American Medical Association* compared health among middle-aged men in the USA and England (not the whole UK).³¹⁵ To increase comparability the study was confined to the non-Hispanic white populations in both countries. People were divided into both income and educational categories. In Figure 13.2 rates of diabetes, hypertension, cancer, lung disease and heart disease are shown in each of three educational categories - high, medium and low. The American rates are the darker bars in the background and those for England are the lighter ones in front. There is a consistent tendency for rates of these conditions to be higher in the US than in England, not just among the less well-educated, but across all educational levels. The same was also true of death rates and various biological markers such as blood pressure, cholesterol and stress measures.

Though this is only just apparent, the authors of the study say that the social class differences in health tend to be steeper in the USA than in England regardless of whether people are classified by income or education.³¹⁶

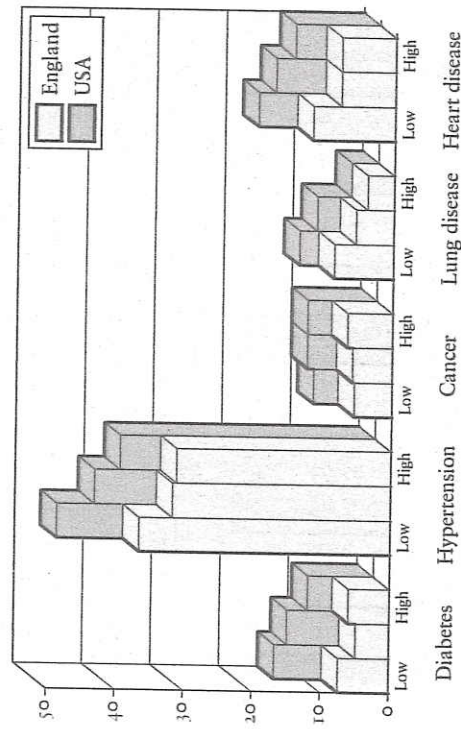


Figure 13.2 Rates of illness are lower at both low and high educational levels in England compared to the USA.³¹⁵

In that comparison, England was the more equal and the healthier of the two countries. But there have also been similar comparisons of death rates in Sweden with those in England and Wales. To allow accurate comparisons, Swedish researchers classified a large number of Swedish deaths according to the British occupational class classification. The classification runs from unskilled manual occupations in class V at the bottom, to professional occupations in class I at the top. Figure 13.3 shows the differences they found in death rates for working-age men.³¹⁷ Sweden, as the more equal of the two countries, had lower death rates in all occupational classes; so much so that their highest death rates – in the lowest classes – are lower than the highest class in England and Wales.

Another similar study compared infant mortality rates in Sweden with England and Wales.³¹⁸ Infant deaths were classified by father's occupation and occupations were again coded the same way in each country. The results are shown in Figure 13.4. Deaths of babies born to single parents, which cannot be coded by father's occupation, are shown separately. Once again, the Swedish death rates are lower right across the society. (Note that as both these studies were published some time ago, the actual death rates they show are considerably higher than the current ones.)

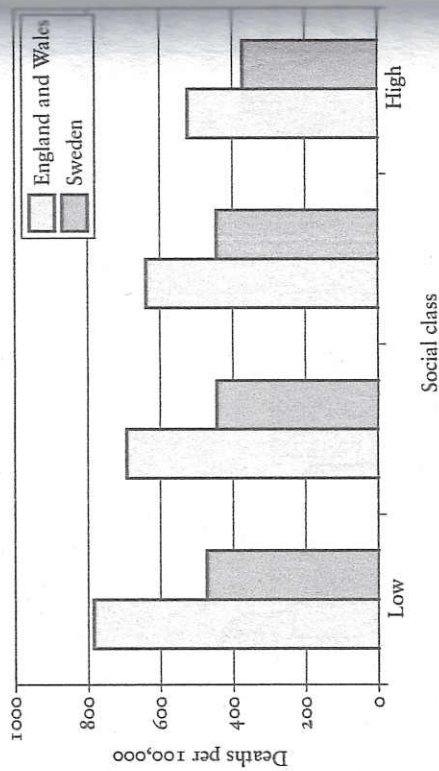


Figure 13.3 Death rates among working-age men are lower in all occupational classes in Sweden compared to England and Wales.³¹⁷

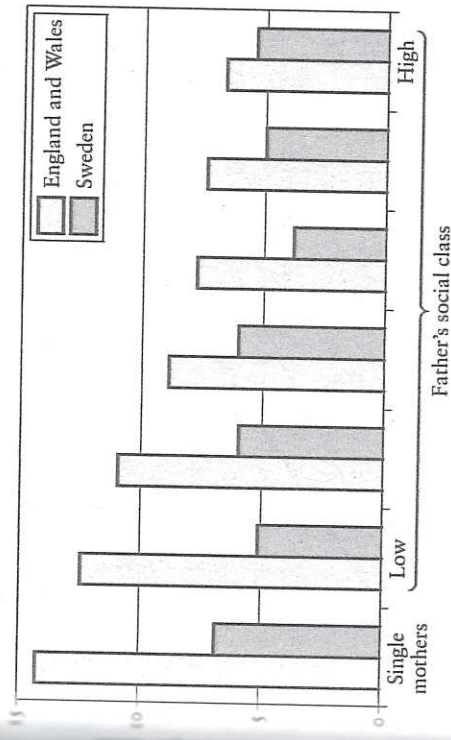


Figure 13.4 Infant mortality rates are lower in all occupational classes in Sweden than in England and Wales.³¹⁸

Comparisons have also been made between the more and less equal of the fifty states of the USA. Here too the benefits of smaller income differences in the more equal states seem to spread across all income groups. One study concluded that 'income inequality exerts a comparable effect across all population subgroups', whether people are classified by education, race or income – so much so that the authors suggested that inequality acted like a pollutant spread throughout society.³¹⁹ In a study of our own, we looked at the relationship between median county income and death rates in all counties of the USA.⁸ We compared the relationship between county median income and county death rates according to whether the counties were in the twenty-five more equal states or the twenty-five less equal states. As Figure 13.5 shows, in both the more and less equal states, poorer counties tended – as expected – to have higher death rates. However at all levels of income, death rates were lower in the twenty-five more equal states than in the twenty-five less equal states. Comparing counties at each level of income showed that the benefits of greater equality were largest in the poorer counties, but still existed even in the richest counties. In its essentials the picture is much like that shown in Figures 13.3 and 13.4 comparing Sweden

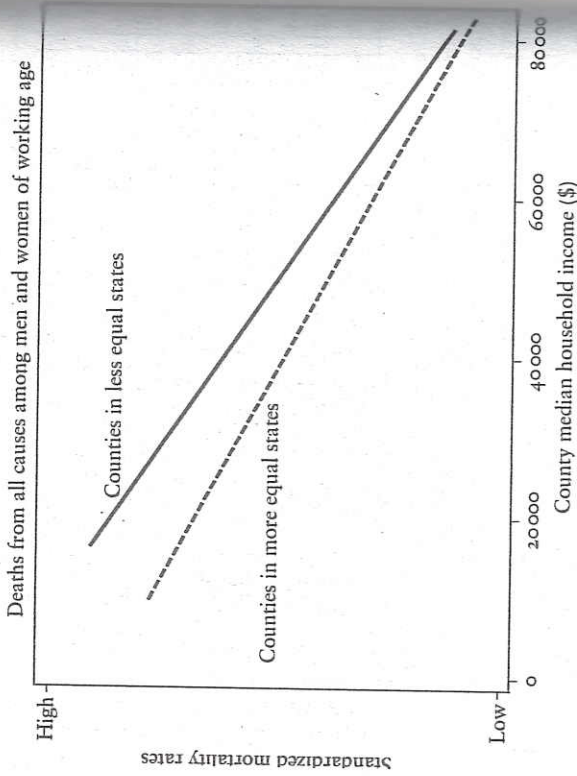


Figure 13.5 The relation between county median income and county death rates according to whether the counties are in the twenty-five most equal states or the twenty-five less equal states.

with England and Wales. Just as among US counties, where the benefits of greater state equality extended to all income groups, so the benefits of Sweden's greater equality extended across all classes but were biggest in the lowest classes.

Figure 8.4 in Chapter 8, which compared young people's literacy scores across different countries according to their parents' level of education (and so indirectly according to the social status of their family of upbringing) also showed that the benefits of greater equality extend throughout society. In more equal Finland and Belgium the benefits of greater equality were, once again, bigger at the bottom of the social ladder than in less equal UK and USA. But even the children of parents with the very highest levels of education did better in Finland and Belgium than they did in the more unequal UK or USA.

A question which is often asked is whether even the rich benefit

from greater equality. Perhaps, as John Donne said, 'No man is an island' even from the effects of inequality. The evidence we have been discussing typically divides the population into three or four income or educational groups, or occasionally (as in Figure 13.4) into six occupational classes. In those analyses it looks as if even the richest groups do benefit. But if, when we talk of 'the rich', we mean millionaires, celebrities, people in the media, running large businesses or making the news, we can only guess how they might be affected. We might feel we live in a world peopled by faces and names which keep cropping up in the media, but such people actually make up only a tiny fraction of 1 per cent of the population and they are just too small a proportion of the population to look at separately. Without data on such a small minority we can only guess whether or not they are likely to escape the increased violence, drugs or mental illness of more unequal societies. The lives and deaths of celebrities such as Britney Spears, John Lennon, Kurt Cobain, Marilyn Monroe, the assassinated Kennedy brothers, Princess Diana or Princess Margaret, suggest they might not. What the studies do make clear, however, is that greater equality brings substantial gains even in the top occupational class and among the richest or best-educated quarter or third of the population, which include the small minority of the seriously rich. In short, whether we look at states or countries, the benefits of greater equality seem to be shared across the vast majority of the population. Only because the benefits of greater equality are so widely shared can the differences in the rates of problems between societies be as large as it is.

As the research findings have come in over the years, the widespread nature of the benefits of greater equality seemed at first so paradoxical that they called everything into question. Several attempts by international collaborative groups to compare health inequalities in different countries suggested that health inequalities did not differ very much from one country to another. This seemed inconsistent with the evidence that health was better in more equal societies. How could greater equality improve health unless it did so by narrowing the health differences between rich and poor? At the time this seemed a major stumbling block. Now, however, we can see how the two sets of findings are consistent. Smaller income

differences improve health for everyone, but make a bigger difference to the health of the poor than the rich. If smaller income differences lead to roughly the same percentage reduction in death rates across the whole society then, when measured in relative terms, the differences in death rates between rich and poor will remain unchanged. Suppose death rates are 60 per 100,000 people in the bottom class and only 20 per 100,000 in the top one. If you then knock 50 per cent off death rates in all groups, you will have reduced the death rate by 30 in the bottom group and by 10 at the top. But although the poor have had much the biggest absolute decline in death rates, there is still a threefold relative class difference in death rates. Whatever the percentage reduction in death rates, as long as it applies right across society, it will make most difference to the poor but still leave relative measures of the difference unchanged.

We can now see that the studies which once looked paradoxical were in fact telling us something important about the effects of greater equality. By suggesting that more and less equal societies contained similar relative health differentials within them, they were telling us that everyone receives roughly proportional benefits from greater equality. There are now several studies of this issue using data for US states,^{8, 319, 320} and at least five international ones, which provide consistent evidence that, rather than being confined to the poor, the benefits of greater equality are widely spread.^{152, 315, 317, 318, 321}

OTHER EXPLANATIONS?

It is clear that there is something which affects how well or badly societies do across a wide range of social problems, but how sure can we be that it is inequality? Before discussing whether inequality plays a causal role, let us first see whether there might be any quite different explanations.

Although people have occasionally suggested that it is the English-speaking countries which do badly, that doesn't explain much of the evidence. For example, take mental health, where the worst performers among the countries for which there is comparable data are English-speaking. In Chapter 5 we showed that the highest rates

are in the USA, followed in turn by Australia, UK, New Zealand and Canada. But even among those countries there is a very strong correlation between the prevalence of mental illness and inequality. So inequality explains why English-speaking countries do badly, and it explains why ones do better or worse than others.

Nor is it just the USA and Britain, two countries which do have a lot in common, which do badly on most outcomes. Portugal also does badly. Its poor performance is consistent with its high levels of inequality, but Portugal and the USA could hardly be less alike in other respects. However, the proof that these relationships are not simply a reflection of something wrong with English-speaking cultures is that even if you delete them from Figure 13.1 (p. 174) there is still a close relationship between inequality and the Index of Health and Social Problems among the remaining countries. The same applies to the dominance of the Nordic countries at the other end of the distribution. They clearly share some important cultural characteristics. But, like the English speaking countries, if you delete them from Figure 13.1, a strong relationship remains between inequality and the Index among the remaining countries.

Although that puts paid to the only obvious cultural explanations, it's worth pointing out some interesting contrasts between countries. For example, although Portugal does badly, Spain fares at least as well as the average – despite the fact that they share a border, they lived under dictators until the mid 1970s, and have many other cultural similarities. Yet all that seems to be trumped by the differences in inequality. The country which does best of all is Japan, but Japan is, in other respects, as different as it could be from Sweden, which is the next best performer. Think of the contrasting family structures and the position of women in Japan and Sweden. In both cases these two countries come at opposite ends of the spectrum. Sweden has a very high proportion of births outside marriage and women are almost equally represented in politics. In Japan the opposite is true. There is a similar stark contrast between the proportion of women in paid employment in the two countries. Even how they get their greater equality is quite different. Sweden does it through redistributive taxes and benefits and a large welfare state. As a proportion of national income, public social expenditure in Japan is, in contrast to

Sweden, among the lowest of the major developed countries. Japan gets its high degree of equality not so much from redistribution as from a greater equality of market incomes, of earnings *before* taxes and benefits. Yet despite the differences, both countries do well – as their narrow income differences, but almost nothing else, would lead us to expect.

This leads us to another important point: greater equality can be gained either by using taxes and benefits to redistribute very unequal incomes or by greater equality in gross incomes before taxes and benefits, which leaves less need for redistribution. So big government may not always be necessary to gain the advantages of a more equal society. The same applies to other areas of government expenditure. For countries in our international analysis, we collected OECD figures on public social expenditure as a proportion of Gross Domestic Product and found it entirely unrelated to our Index of Health and Social Problems. Perhaps rather counter-intuitively, it also made no difference to the association between inequality and the Index. Part of the reason for this is that governments may spend either to prevent social problems or, where income differences have widened, to deal with the consequences.

Examples of these contrasting routes to greater equality which we have seen in the international data can also be found among the fifty states of the USA. Although the states which perform well are dominated by ones which have more generous welfare provisions, the state which performs best is New Hampshire, which has among the lowest public social expenditure of any state. Like Japan, it appears to get its high degree of equality through an unusual equality of market incomes. Research using data for US states which tried to see whether better welfare services explained the better performance of more equal states found that although – in the US setting – services appear to make a difference, they do not account fully for why more equal states do so much better.³⁰⁹ The really important implication is that how a society becomes more equal is less important than whether or not it actually does so.

ETHNICITY AND INEQUALITY

People sometimes wonder whether ethnic divisions in societies account for the relationship between inequality and the higher frequency of health and social problems. There are two reasons for thinking that there might be a link. First is the idea that some ethnic groups are inherently less capable and more likely to have problems. This must be rejected because it is simply an expression of racial prejudice. The other, more serious, possibility is that minorities often do worse because they are excluded from the educational and job opportunities needed to do well. In this view, prejudice against minorities might cause ethnic divisions to be associated with bigger income differences and, flowing from this, also with worse health and more frequent social problems. This would, however, produce a relation between income inequality and worse scores on our index through very much the same processes as are responsible for the relationship wherever it occurs. Ethnic divisions may increase social exclusion and discrimination, but ill-health and social problems become more common the greater the relative deprivation people experience – whatever their ethnicity.

People nearer the bottom of society almost always face downward discrimination and prejudice. There are of course important differences between what is seen as class prejudice in societies without ethnic divisions, and as racial prejudice where there are. Although the cultural marks of class are derived inherently from status differentiation, they are less indelible than differences in skin colour. But when differences in ethnicity, religion or language come to be seen as markers of low social status and attract various downward prejudices, social divisions and discrimination may increase.

In the USA, state income inequality is closely related to the proportion of African-Americans in the state's population. The states with wider income differences tend to be those with larger African-American populations. The same states also have worse outcomes – for instance for health – among both the black *and* the white population. The ethnic divide increases prejudice and so widens income

differences. The result is that both communities suffer. Rather than whites enjoying greater privileges resulting from a larger and less well-paid black community, the consequence is that life expectancy is shorter among both black and white populations.

So the answer to the question as to whether what appear to be the effects of inequality may actually be the result of ethnic divisions is that the two involve most of the same processes and should not be seen as alternative explanations. The prejudice which often attaches to ethnic divisions may increase inequality and its effects. Where ethnic differences have become strongly associated with social status divisions, ethnic divisions may provide almost as good an indicator of the scale of social status differentiation as income inequality. In this situation it has been claimed that income differences are trumped, statistically speaking, by ethnic differences in the USA.³¹⁰ However, other papers examining this claim have rejected it.³¹¹⁻¹³ The USA, with its ethnic divisions, is only one of a great many contexts in which the impact of income inequality has been tested. We reviewed 168 published reports of research examining the effect of inequality on health, and there are now around 200 in all.¹⁰ In many of these (for example Portugal) there is no possibility that effects could be attributed to ethnic divisions. An international study which included a measure of each country's ethnic mix, found that it did not account for the tendency for more unequal societies to be less healthy.³¹⁴

SINGLE PARENTS

As we noted near the beginning of this chapter, it is usually the same countries that do well and the same ones which do badly whatever health or social problems we look at. The fact that so many quite different problems share the same international pattern implies that they have a common underlying cause. The question is whether that common cause is inequality. Another alternative possibility is that these problems might all be rooted in the breakdown of the two-parent family as the unit in which children are brought up. There is a tendency to blame a wide range of social problems on bad parenting

particularly resulting from the increased prevalence of single parents.

Data comparing children brought up in single parent families with those brought up by two parent families almost always shows that the children of single parents do less well. More controversial is the question of how much this reflects differences in mothers' education and maternal depression,³⁹⁷ how much is due to the tendency for single parent families to be poorer, and how much results from less good parent-child relationships. Usually all these factors are found to make substantial contributions.

The proportion of parents who are single varies dramatically from one nation to another. In countries like Greece, only about 4 per cent of families with children are single parent families, but in others, like the USA, Britain and New Zealand, it rises to almost 30 per cent. Could this explain why children in some countries do less well than others? Rather than inequality, is the real issue the problems of single parenthood? To find out, we looked to see if the UNICEF index of child wellbeing was related to the proportion of parents who were single parents in each country. The surprising results are shown in figure 13.6. There is no connection between the proportion of single parents and national standards of child wellbeing. This contrasts sharply with the strong relationship between child wellbeing and income inequality shown in Figure 2.6 (see p. 23).

That there is so little connection at the international level between child wellbeing and the proportion of single parents is probably partly a reflection of the extent to which welfare systems in some countries protect single parent families from poverty. Recent OECD figures suggest that only 6 per cent of Swedish single parents with jobs, and 18 per cent of those without, were in relative poverty, as against 36 and 92 per cent for the USA.³⁹⁹ The figures for the UK are 7 per cent for single parents with jobs and 39 per cent for those without. The provision of childcare which enables single parents to work must also be important.

Given the political controversies around the provision of state support to single parents, two points are worth noting. First, that it seems to be possible to safeguard children against most of the adverse effects of being brought up by lone parents, and second, that

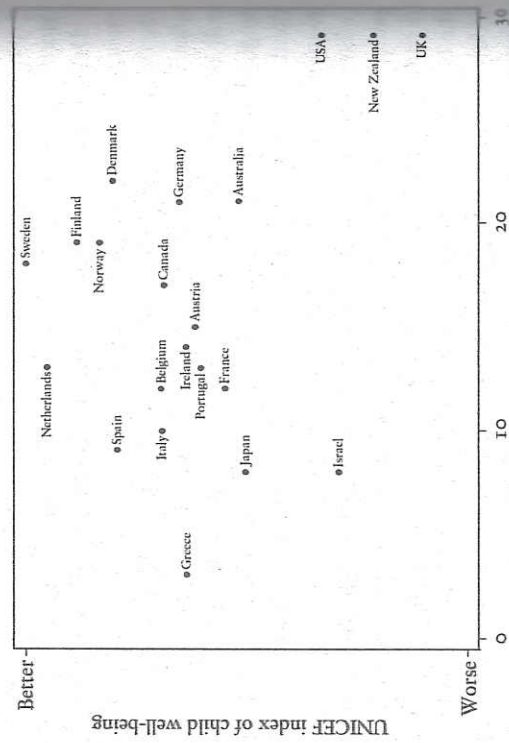


Figure 13.6 Lone parents as % of all households with dependent children
*Child wellbeing is not related to the proportion of single parents.*³⁹⁸

denying state support does not seem to reduce the proportion of single parents.

DIFFERENT HISTORIES

Another explanation sometimes suggested for why income inequality is related to health and social problems is that what matters is not the inequality itself, but the historical factors which led societies to become more or less equal in the first place – as if inequality stood, almost as a statistical monument, to a history of division. This is most often suggested in relation to the USA when people notice that the more unequal states are usually (but not always) the southern states of the Confederacy with their histories of plantation economies dependent on slave labour. However, the degree of equality or inequality in every setting has its own particular history. If we look to see how Sweden became more equal, or how Britain and a number of other countries have recently become much less so,

or how the regions of Russia or China developed varying amounts of equality or inequality, we get different stories in every case. And of course these different backgrounds are important: there is no doubt that there are, in each case, specific historical explanations of why some countries, states or regions are now more or less unequal than others. But the prevalence of ill-health and of social problems in those societies is not simply a patternless reflection of so many unique histories. It is instead patterned according to the amount of inequality which has resulted from those unique histories. What seems to matter therefore is not *how* societies got to where they are now, but *where* – in terms of their level of inequality – it is that they have now got to.

That does not mean that these relations with inequality are set in stone for all time. What does change things is the stage of economic development a society has reached. In this book our focus is exclusively on the rich developed societies. But it is clear that a number of outcomes, including health and violence, are also related to inequality in less developed countries. What happens during the course of economic development is that some problems reverse their social gradients and this changes their associations with inequality. In poorer societies both obesity and heart disease are more common among the rich, but as societies get richer they tend to reverse their social distribution and become more common among the poor. As a result, we find that among poorer countries it is the more unequal ones which have more underweight people – the opposite of the pattern among the rich countries shown in Chapter 7. The age of menarche also changes its social distribution during the course of economic development. When more of the poor were undernourished they reached sexual maturity later than girls in richer families. With the rise in living standards that pattern too has reversed – perhaps contributing to the gradient in teenage pregnancies described in Chapter 9. All in all, it looks as if economic growth and social status differences are the most powerful determinants of many aspects of our lives.

CAUSALITY

The relationships between inequality and poor health and social problems are too strong to be attributable to chance; they occur independently in both our test-beds; and those between inequality and both violence and health have been demonstrated a large number of times in quite different settings, using data from different sources. But association on its own does not prove causality and, even if there is a causal relationship, it doesn't tell us what is cause and what is effect.

The graphs we have shown have all been cross-sectional – that is, they have shown relationships at a particular point in time rather than as they change in each country over time. However these cross-sectional relationships could only keep cropping up if somehow they changed together. If health and inequality went their separate ways and passed by only coincidentally, like ships in the night, we would not keep catching repeated glimpses of them in close formation. There is usually not enough internationally comparable data to track relationships over time, but it has been possible to look at changes in health and inequality. One study found that changes between 1975 and 1985 in the proportion of the population living on less than half the national average income among what were then the twelve members of the European Union were significantly related to changes in life expectancy.⁸¹ Similarly, the decrease in life expectancy in Eastern European countries in the six years following the collapse of communism (1989–95) was shown to be greatest in the countries which saw the most rapid widening of income differences. A longer-term and particularly striking example of how income distribution and health change over time is the way in which the USA and Japan swapped places in the international league table of life expectancy in developed countries. In the 1950s, health in the USA was only surpassed by a few countries. Japan on the other hand did badly. But by the 1980s Japan had the highest life expectancy of all developed countries and the USA had slipped down the league and was well on the way to its current position as number 30 in the developed world. Crucially, Japanese income differences narrowed during the

forty years after the Second World War. Its health improved rapidly, overtaking other countries, and its crime rate (almost alone among developed countries) decreased. Meanwhile, US income differences widened from about 1970 onwards.

Chapter 3 provided a general explanation of why we are so sensitive to inequality, and in each of Chapters 4–12 we have suggested causal links specific to each health and social problem. Earlier in this chapter we saw why cultural factors cannot be regarded as rival explanations of the associations with inequality. What other explanation might there be if one wanted to reject the idea of a causal relationship? Could inequality and each of the social problems be caused by some other unknown factor?

Weak relationships may sometimes turn out to be a mere mirage reflecting the influence of some underlying factor, but that is much less plausible as an explanation of relationships as close as these. The fact that our Index is not significantly related to average incomes in either our international test-bed or among the US states almost certainly rules out any underlying factor directly related to material living standards. Our analysis earlier in this chapter also rules out government social expenditure as a possible alternative explanation. As for other possible hidden factors, it seems unlikely that such an important causal factor will suddenly come to light which not only determines inequality but which also causes everything from poor health to obesity and high prison populations.

That leaves the question of which way causality goes. Occasionally when we describe our findings people suggest that instead of inequality causing everything else, perhaps it all works the other way round and health and social problems cause bigger income differences. Of course, in the real world these things do not happen in clearly defined steps which would allow us to see which comes first. The limited evidence from studies of changes over time tells us only that they tend to change together. Could it be that people who succumb to health or social problems suffer a loss of income and that tends to increase inequality? Perhaps people who are sick or very overweight are less likely to have jobs or to be given promotion. Could this explain why countries with worse health and social problems are more unequal?

The short answer is no – or at least, not much. First, it doesn't explain why societies that do badly on any particular health or social problem tend to do badly on all of them. If they are not all caused at least partly by the same thing, then there would be no reason why countries which, for instance, have high obesity rates should also have high prison populations. Second, some of the health and social problems are unlikely to lead to serious loss of income. Using the UNICEF index we showed that many childhood outcomes were worse in more unequal countries. But low child wellbeing will not have a major influence on income inequality among adults. Nor could higher homicide rates be considered as a major cause of inequality even if the numbers were much higher. Nor for that matter could expanding prison populations lead to wider income differences – rather the reverse, because measures of inequality are usually based on measures of household income which leave out institutionalized populations. Although it could be argued that teenage parents might increase inequality because they are often single and poor, we have seen that even when more equal countries have a high proportion of single parents that does not explain national differences in child wellbeing. This is partly because generous welfare systems ensure that very much smaller proportions of them are in poverty than in more unequal countries.

However, there is a more fundamental objection to the idea that causality might go from social problems to inequality. Earlier in this chapter we showed that it was people at almost all income levels, not just the poor, who do worse in more unequal societies. Even when you compare groups of people with the same income, you find that those in more unequal societies do worse than those on the same income in more equal societies. Though some more unequal societies have more poor people, most of the relationship with inequality is, as we pointed out earlier, not explained by the poor: the effects are much more widespread. So even if there is some loss of income among those who are sick or affected by some social problem, this does not begin to explain why people who remain on perfectly good incomes still do worse in more unequal societies.

Another alternative approach is to suggest that the real cause is not income distribution but something more like changes in

ideology, a shift perhaps to a more individualistic economic philosophy or view of society, such as the so-called 'neo-liberal' thinking. Different ideologies will of course affect not only government policies but also decisions taken in economic institutions throughout society. They are one of very many different factors which can affect the scale of income differences. But to say that a change in ideology can affect income distribution is not at all the same as saying that it can also affect all the health and social problems we have discussed – regardless of what happens to income distribution. Although it does look as if neo-liberal policies widened income differences (see Chapter 16) there was no government intention to lower social cohesion or to increase violence, teenage births, obesity, drug abuse and everything else. So while changes in government ideology may sometimes be among the causes of changes in income distribution, this is not part of a package of policies intended to increase the prevalence of social problems. Their increase is, instead, an unintended consequence of the changes in income distribution. Rather than challenging the causal role of inequality in increasing health and social problems, if governments understood the consequences of widening income differences they would be keener to prevent them.

Economists have never suggested that poor health and social problems were the real determinants of income inequality. Instead they have concentrated on the contributions of things like taxes and benefits, international competition, changing technology and the mix of skills needed by industry. None of these is obviously connected to the frequency of health and social problems. In Chapter 16 we shall touch on the factors responsible for major changes in inequality in different countries.

A difficulty in proving causality is that we cannot experimentally reduce the inequalities in half our sample of countries and not in the others and then wait to see what happens. But purely observational research can still produce powerful science – as astronomy shows. There are, however, some experimental studies which do support causality working in the way our argument suggests. Some of them have already been mentioned in earlier chapters. In Chapter 8 on education we described experiments which show how much people's performance is affected by being categorized as socially inferior.

Indian children from lower castes solved mazes just as well as those from higher castes – until their low caste was made known. Experiments in the United States have shown that African-American students (but not white students) do less well when they are told a test is a test of ability than they do on the same test when they are told it is not a test of ability. We also described the famous 'blue eyes' experiments with school children which showed the same processes at work.

Sometimes associations which are only observed among human beings can be shown to be causal in animal experiments. For instance, studies of civil servants show cardiovascular health declines with declining social status. But how can we tell whether the damage is caused by low social status rather than by poorer material conditions? Experiments with macaque monkeys make the answer clear. Macaques form status hierarchies but with captive colonies it is possible to ensure all animals live in the same material conditions: they are given the same diet and live in the same compounds. In addition, it is possible to manipulate social status by moving animals between groups. If you take low-status animals from different groups and house them together, some have to become high-status. Similarly, if you put high-status animals together some will become low-status. Animals which move down in these conditions have been found to have a rapid build-up of atherosclerosis in their arteries.³² Similar experiments also suggest a causal relationship between low social status and the accumulation of abdominal fat.³³ In Chapter 5 we mentioned other animal experiments which showed that when cocaine was made available to monkeys in these conditions, it was taken more by low social status animals – as if to offset their lower dopamine activity.³⁹ Lastly, the primary importance of inequality has been confirmed by researchers using statistical methods designed to check the causal pathways through which inequality affects levels of trust or bullying in schools.^{27, 400, 402}

Although we know of no experiments confirming the causality of the relation between inequality and violence, we invite anyone to go into a poor part of town and try randomly insulting a few people.

We have discussed the reasons for thinking that these links are causal from a number of different perspectives. But as philosophers

of science, such as Sir Karl Popper, have emphasized, an essential element in judging the success of any theory is whether it makes successful predictions. A successful theory is one which predicts the existence of previously unknown phenomena or relationships which can then be verified. The theory that more equal societies were healthier arose from one set of international data. There have now been a very large number of tests (about 200) of that theory in different settings. With the exception of studies which looked at inequality in small local areas, an overwhelming majority of these tests confirmed the theory. Second, if the link is causal it implies that there must be a mechanism. The search for a mechanism led to the discovery that social relationships (as measured by social cohesion, trust, involvement in community life and low levels of violence) are better in more equal societies. This happened at a time when the importance of social relationships to health was beginning to be more widely recognized. Third, the theory that poor health might be one of a range of problems with social gradients related to inequality has been tested (initially on cause-specific death rates as described earlier in this chapter) and has since been amply confirmed in two different settings as we have described in Chapters 4–12. Fourth, at a time when there was no reason to think that inequality had psychosocial effects, the relation between health and equality seemed to imply that inequality must be affecting health through psychosocial processes related to social differentiation. That inequality does have powerful psychosocial effects is now confirmed by its links (shown in earlier chapters) with the quality of social relations and numerous behavioural outcomes.

It is very difficult to see how the enormous variations which exist from one society to another in the level of problems associated with low social status can be explained without accepting that inequality is the common denominator, and a hugely damaging force.

Accepting this does not involve a huge theoretical leap. Two points should be kept in mind. First, the evidence merely confirms the common intuition that inequality is divisive and socially corrosive. Second, everyone knows that within our societies ill health and social problems are related to social status and are most common in the most deprived neighbourhoods. Though you could once have

been forgiven for thinking that this merely reflected a tendency for the vulnerable to end up at the bottom of society, it is now obvious that this fails to explain why these problems are so much more common in more unequal societies. This book simply points out that if you increase the income and status differences related to these problems, then – unsurprisingly – the problems all become more common.

I4

Our social inheritance

Gifts make friends and friends make gifts.

Marshall Sahlins, *Stone Age Economics*

LOOKING BEFORE LEAPING

Although attitudes to inequality have always been central to the disagreement between the political right and left, few would not prefer a friendlier society, with less violence, better mental health, more involvement in community life – and so on. Now that we have shown that reducing inequality leads to a very much better society, the main sticking point is whether people believe greater equality is attainable. Our analysis has not of course compared existing societies with impossibly egalitarian imaginary ones: it is not about utopias or the extent of human perfectibility. Everything we have seen comes from comparisons of existing societies, and those societies have not been particularly unusual or odd ones. Instead, we have looked exclusively at differences between the world's richest and most successful economies, all of which enjoy democratic institutions and freedom of speech. There can be no doubt whatsoever that human beings are capable of living well in societies with inequalities as small – for instance – as Japan and the Nordic countries. Far from being impractical, the implications of our findings are probably more consistent with the institutional structures of market democracy than some people – at either end of the political spectrum – would like to believe.

Some may still feel hesitant to take the evidence at face value.