Income Inequality: What's Wrong With It, and What's Not

F. Spagnoli July 9th, 2014 (draft)

Abstract

In this paper, I examine a number of commonly cited negative effects of high or rising levels of income inequality. I look at some of the literature in order to assess the statistical and empirical evidence in favor of or against the presence and/or strength of those negative effects. Given the prevalence of the topic of income inequality in contemporary political, economic and social discourse, it's important to have a good understanding of the effects of income inequality and to be able to identify effects that are or are not supported by strong statistical evidence. Such an understanding will also help to improve policies intended to diminish income inequality or to mitigate its effects (such as, for example, progressive taxation or education subsidies).

Given the size of the literature, this overview is far from complete. However, it does manage to identify certain negative effects which have a strong factual basis and which vindicate some of the often strongly expressed concerns about income inequality. At the same time, however, the paper identifies other commonly cited effects for which there is no strong evidence or for which the evidence is contradictory.

I focus on measurable harms resulting from income inequality and leave aside possible objections of a moral or philosophical nature (such as concerns about justice), although I do mention the latter briefly. It may very well be possible that objections of this nature are sufficient reasons for opposing inequality, even in the absence of measurable harms. I don't express a view on that possibility and content myself with the observation that the measurable harms are the sufficient reasons.

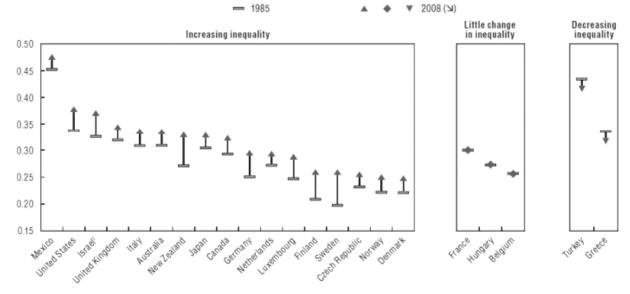
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JEL codes: D31, D63, E24, I14, I24, I32, I38, O15, P46,

Although there are different ways to measure income inequality, the Gini Coefficient is the most common one. According to a recent OECD publication, income inequality according to the Gini Coefficient has increased in most developed countries over the last decades:

Figure 1. Income inequality increased in most, but not all OECD countries

Gini coefficients of income inequality, mid-1980s and late 2000s



Note: For data years see Table 1. "Little change" in inequality refers to changes of less than 2 percentage points.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD Database on Household Income Distribution and Poverty.

The causes of increasing income inequality are probably numerous. Technological changes, globalization, lower levels of unionization, tax policies and companies' salary and compensation policies are often cited. However, the *effects* rather than the *causes* of income inequality concern us here. Let's look at a number of commonly cited negative effects of high or rising levels of income inequality and examines the literature in order to assess the statistical and empirical evidence in favor of or against the presence and/or strength of those negative effects. Given the prevalence of the topic of income inequality in contemporary political, economic and social discussions, it's important to have a good understanding of the effects of income inequality and to be able to identify effects that are or are not supported by strong statistical evidence. Such an understanding will also help to improve policies intended to diminish income inequality or to mitigate its effects (such as, for example, progressive taxation or education subsidies).

Before we examine the supposedly negative effects of income inequality, I should mention that income inequality also has positive outcomes. Some degree of inequality in some areas is often viewed as a necessary incentive to do well and be productive. Many talented people are moti-

¹ For the calculation method of the Gini coefficient, see http://en.wikipedia.org/wiki/Gini_coefficient. Other measures are: the proportion of a population with income less than 50% of the median income; ratio of average income for the 10% of the population with the lowest income to the average income for the 10% of the population with the highest income; average incomes of 10th and 90th percentile as percentage of median income; the Palma Ratio (see

http://en.wikipedia.org/wiki/Income_inequality_metrics#Palma_ratio), etc.

² "Divided We Stand: Why Inequality Keeps Rising", OECD paper, December 2011, http://www.oecd.org/els/social/inequality

vated by money rather than status, recognition, pleasure or other effects of their activities. Ultimately, the presence of monetary incentives for the more productive among us also benefits the worst off as they can join in the gains from increased production (such as higher employment levels, more consumer choice etc.). Some level of inequality is then necessary for higher welfare at the bottom of the income distribution.

The incentive argument in favor of income inequality has some plausibility and should therefore be taken into account when assessing both the more negative consequences of income inequality and the policies aimed at remedying those negative consequences: anti-inequality policies may remedy some of inequality's negative effects but may also undo some of the benefits of inequality. *In casu*, they may remove the incentive effect of inequality, which in turn may lead to economic harm even for those sections of the population that supposedly suffer from the negative effects of inequality. The harm resulting from negative effects of inequality may not always outweigh the harm done by policies that attempt to reduce inequality, since those policies may also reduce the positive effects of inequality.

However, the merits of the incentive argument are often overstated and limited at best. Incentives do not justify inequality across the board, only specific types of inequality that have a demonstrable incentive effect and only when the benefits of the incentives are not drowned by the harms of other effects of inequality. For instance, certain productive activities or certain producers may not respond positively to monetary incentives. People do things for different reasons, and money doesn't always count that much. Other people may be incentivized to work harder in order to make up for the money that is redistributed away from them by governments trying to reduce inequality. If that is a common enough attitude, the productivity losses of removing the incentive effect are limited. In addition, some people earn a lot in morally blameworthy ways. Restrictions on redistribution for the sake of incentives will only incentivize immorality in cases such as these.

The limited truth of the incentive theory is obvious from this graph³:

³ Taken from: http://www.worldbank.org/content/dam/Worldbank/document/WB-goals2013.pdf

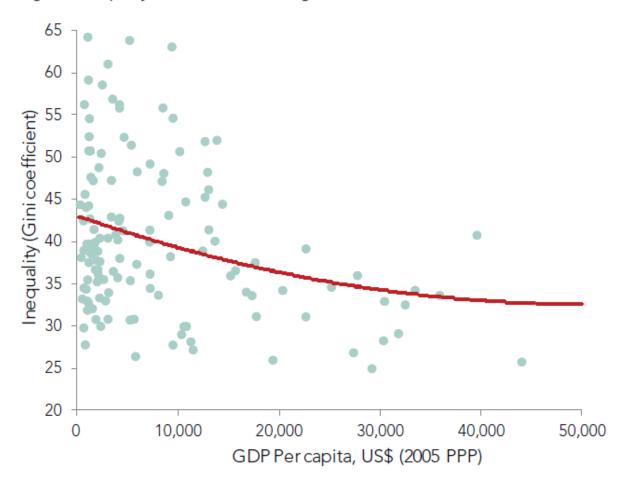


Figure 3: Inequality tends to be lower in high-income countries

Source: World Bank database, based on household surveys from countries.

The fact remains, however, that some instances of inequality are justified by the incentive argument: less inequality means less incentives, and fewer incentives can make the worst off even worse off. This basic tenet of economic theory⁴ should be kept in mind when assessing the best policy reactions to certain harmful consequences of income inequality.

Apart from the incentive argument, one can also make a case in favor of inequality that is inspired not by economic effects but by moral concerns. Some people perhaps deserve their higher incomes because they invest greater efforts in morally praiseworthy undertakings that happen to yield high returns for an investment of effort. Indeed, people may have different incomes simply because they have different levels of human capital and productive abilities. Some earn more because they contribute more – to their employers but also to society. They deserve, in a moral sense of the word, their higher incomes because of the level and nature of their contributions. Increasing differences in income levels are then the reflection of an increasing gap in productivity and human capital between some groups in society. Efforts to remedy

⁴ See par. I.2.2. of *An Inquiry into the Nature and Causes of the Wealth of Nations*, by Adam Smith: "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest".

some of the harmful consequences of inequality that go beyond investments in human capital should take into account the moral value of inequality. Some balancing of values is necessary and it would be immoral, according to this argument, to focus exclusively on remedying effects of inequality without taking into account the moral value of inequality.

However, just as in the case of the incentive argument, the desert argument in favor of inequality is often overstated. As already mentioned above, inequality is not, in many cases, the result of effort and desert in the pursuit of morally praiseworthy goals but instead the outcome of luck, market failure, market manipulation, asymmetric information or other morally neutral or morally dubious causes or goals.

Hence, if we agree that arguments in favor of inequality are at best of limited use, then we can focus on the arguments against. The latter mirror the structure of the former: either they identify economic or social effects of inequality – negative effects in this case - or they are focused more on moral concerns related to issues of justice. I will leave the philosophy for another occasion.

First off, it's often assumed that income inequality has a detrimental effect on **economic growth**. Theoretically, high inequality reduces overall consumption because the wealthy consume a smaller share of their income than the poor, and many people at the bottom of the unequal distribution may reduce their work effort if they sense that society in unfair to them.

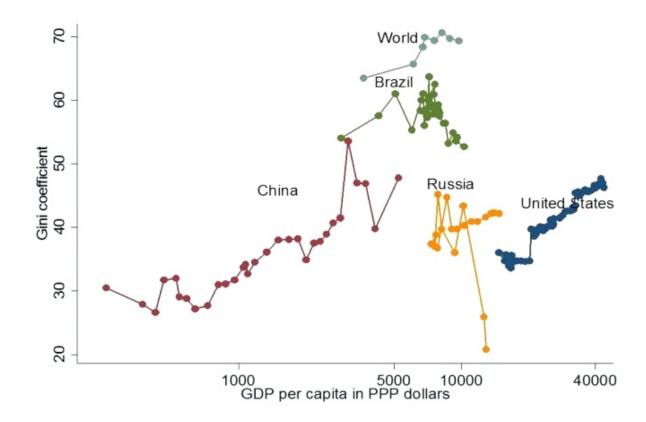
However, the classic causal story is different. Following Simon Kuznets, many economists believe that growth determines inequality rather than the other way around: first growth drives inequality up, and then it gradually reduces it.

[T]here's an inverted U-shaped relationship over long periods of economic development. As emerging economies grow they initially become less equal as the few with high financial endowments profit off of their ownership of key productive resources, like land. Then, as industrialization evolves, much more of the population has the chance to participate in higher value-added work which reduces inequality. Jared Bernstein⁵

This Kuznetsian view has come under fire recently. Thomas Piketty for instance, in his "Capital in the Twenty-First Century", has criticized Kuznets' view that inequality will eventually stabilize and subside on its own given increasing growth. According to Piketty, increasing wealth concentration is a likely outcome for the foreseeable future. Kuznets findings were based on a historical anomaly. And indeed, the lines in this graph⁶ do not turn downwards to form an inverted U-shape:

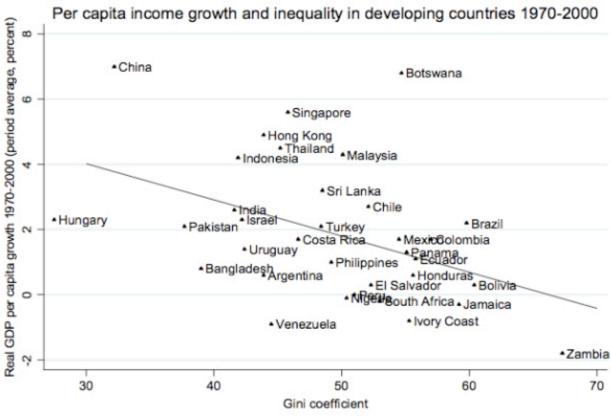
⁵ http://jaredbernsteinblog.com/inequality-and-growth/

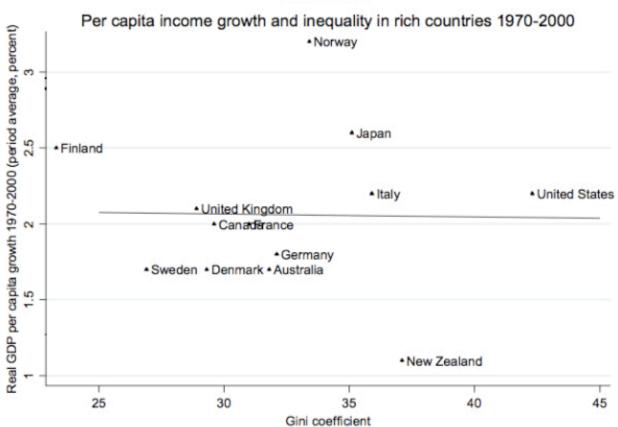
⁶ https://twitter.com/BrankoMilan/status/389864802106867713/photo/1



So maybe the causal link does indeed go the other way. Different levels of income inequality will then influence growth⁷. For example, here's a study⁸ arguing that high income inequality is likely to inhibit growth, especially in developing countries:

⁷ There are probably numerous determinants of growth, many of them more important than (in)equality.





The likely reason for this effect:

high income inequality can discourage the evolution of the economic and political institutions associated with accountable government (which in turn enable a market environment conducive to investment and growth); and ... high income inequality can undermine the civic and social life that sustains effective collective decision-making, especially in multi-ethnic settings. Nancy Birdsall⁹

Another study ¹⁰ comes to a similar conclusion. It argues that, in general, more inequality endangers the sustainability of growth. Long consistent spells of economic growth are correlated with low levels of income inequality:

⁹ http://www.cgdev.org/content/publications/detail/13505

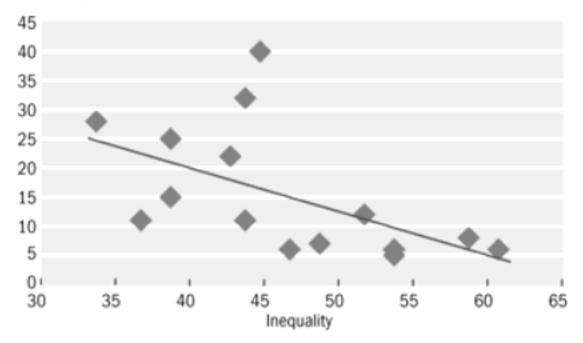
¹⁰ http://www.imf.org/external/pubs/ft/fandd/2011/09/Berg.htm

Chart 3

Lasting effects

More inequality seems to spell less sustained growth.

(years in growth spell)



Sources: Penn World Tables; and Wide World Inequality Database.

Note: Inequality is measured by the Gini coefficient, which ranges from zero, where all households have the same income, to 100, where one household has all the income. All spells lasted a minimum of five years. No incomplete spells are included. The data cover the period from 1950 to 2006. Countries in the sample include Belgium, Brazil, Cameroon, Colombia, Ecuador, El Salvador, Greece, Guatemala, Jamaica, Jordan, Pakistan, Panama, Singapore, Thailand, and Zambia.

A growth spell in this graph is a period of at least five years that begins with an unusual increase in the growth rate and ends with an unusual drop in growth.

It may seem counterintuitive that inequality is strongly associated with less sustained growth. After all, some inequality is essential to the effective functioning of a market economy and the incentives needed for investment and growth ... But too much inequality might be destructive to growth. Beyond the risk that inequality may amplify the potential for financial crisis, it may also bring political instability, which can discourage investment. Inequality may make it harder for governments to make difficult but necessary choices in the face of shocks, such as raising taxes or cutting public spending to avoid a debt crisis. Or inequality may reflect poor people's lack of access to financial services, which gives them fewer opportunities to invest in education and entrepreneurial activity.

 \dots [S]ocieties with more equal income distributions have more durable growth. \dots [A] 10 percentile decrease in inequality (represented by a change in the Gini coefficient from 40 to 37) increases the expected length of a growth spell by 50 percent. Andrew G. Berg and Jonathan D. Ostry 11

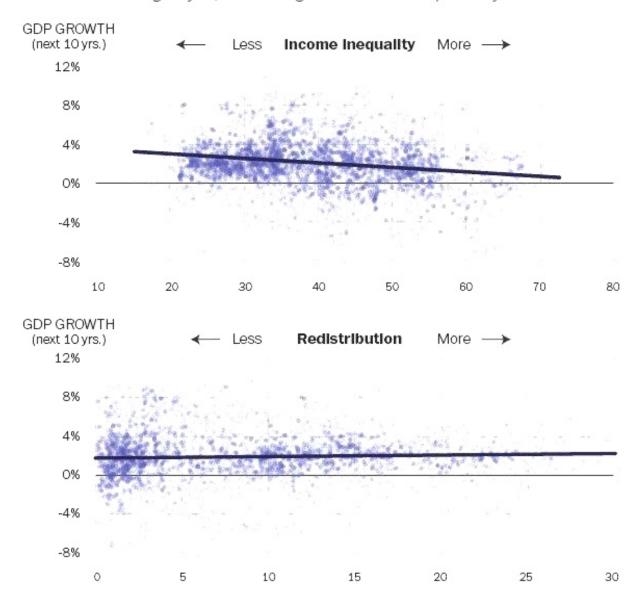
Some additional support¹² for this view: redistributive policies – which are anti-inequality policies – don't actually harm growth:

¹¹ http://www.imf.org/external/pubs/ft/fandd/2011/09/Berg.htm

¹² http://www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf

Inequality a drag on GDP, while redistribution has little effect

Figures represent country-level observations of average income inequality (Gini coefficient) and net redistribution in a given year, versus GDP growth over the subsequent ten years.



SOURCE: "Redistribution, Inequality and Growth" GRAPHIC: The Washington Post. Published March 13, 2014

Redistribution doesn't help growth either, according to this graph, but maybe it counteracts the negative effect of inequality on growth given that it counteracts inequality. In that sense, it does help.

Let's now turn to another possible effect of high inequality. Some¹³ have hypothesized that there's a link between inequality and **poverty**. For example, where the income gap between the middle class and the poor is low, the former may feel more solidarity with the latter and may be more willing to fund a generous system of social security, lifting up the incomes of the latter. And indeed, we see that poverty rates are higher in more unequal societies:

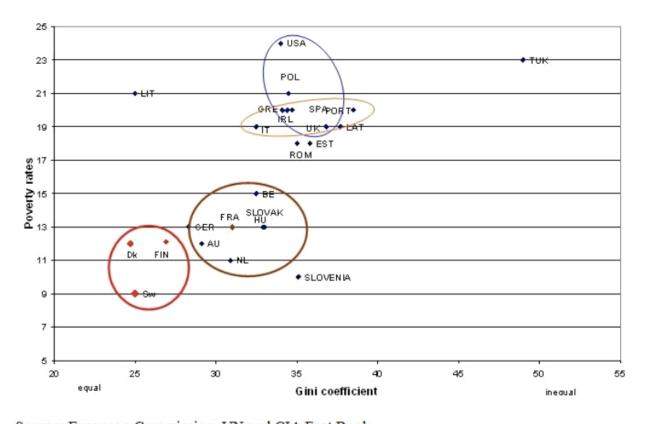


Figure 2. Income Distribution and Poverty

Source: European Commission, UN and CIA Fact Book.

Does that mean that high income inequality leads to more poverty? Not necessarily. This would probably be the case if we saw that a country's poverty rate grows with increasing inequality, but that doesn't happen. Higher incomes for the poor result mainly from government transfers, and these do not mechanically decrease or increase with rising or diminishing inequality, contrary to the stated hypothesis.

If we look across the rich nations, it turns out that there is no relationship between changes in income inequality and changes in the absolute incomes of low-end households. The reason is that income growth for poor households has come almost entirely via increases in net government transfers, and the degree to which governments have increased transfers seems to have been unaffected by changes in income inequality. ...

¹³ "The Structure of Inequality and the Politics of Redistribution", Noam Lupu and Jonas Pontussen, American Political Science Review, Vol. 105, No. 2, May 2011, http://neighborhoodpartnerships.org/wp-content/uploads/2011/12/S3 structure inequality.pdf

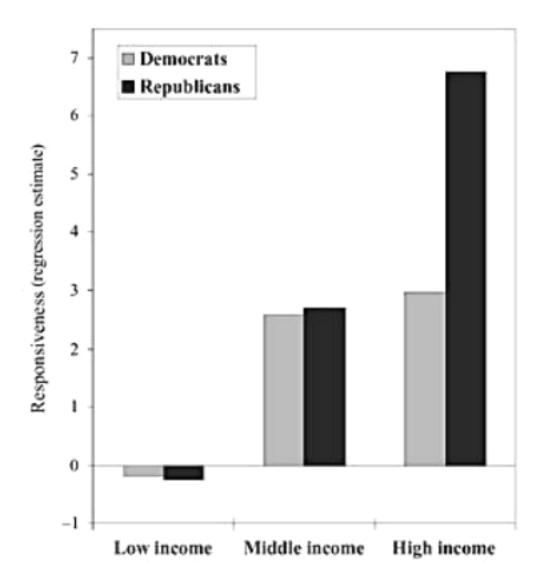
In some countries with little or no rise in income inequality, such as Sweden, government transfers increased and so did the incomes of poor households. In others, such as Germany, transfers and the incomes of low-end households did not increase.

Among nations with sharp increases in top-heavy inequality, we observe a similar disjunction. Here the U.S. and the U.K. offer an especially revealing contrast. The top 1%'s income share soared in both countries, and through the mid-1990s poor households made little progress ... But over the next decade low-end American households advanced only slightly, whereas their British counterparts experienced sizable gains [resulting from the redistributive policies of the Labour government, FS]. Lane Kenworthy 14

So, in other words, there are countries with soaring inequality that still manage to make the poor better off in absolute terms (not in relative terms obviously) through redistribution. Other countries that witness the same evolution of inequality don't make their poor better off. Hence, the view that inequality exacerbates poverty – perhaps through some form of loss of solidarity between middle and lower classes, a loss that translates into diminished support for redistributive policies – doesn't seem correct.

Another commonly cited effect of inequality is the hollowing out of **democracy**. Democracy is based on the ideal of the equal influence of every citizen, but income inequality can give wealth-ier citizens a greater ability to influence. And, indeed, the data show that politics is more responsive to the interests of the rich than to the interests of the poor:

¹⁴ http://lanekenworthy.net/2010/12/14/has-rising-inequality-been-bad-for-the-poor/



In almost every instance, [US] senators appear to be considerably more responsive to the opinions of affluent constituents than to the opinions of middle-class constituents, while the opinions of constituents in the bottom third of the income distribution have no apparent statistical effect on their senators' roll call votes. Disparities in representation are especially pronounced for Republican senators, who were more than twice as responsive as Democratic senators to the ideological views of affluent constituents. Larry Bartels ¹⁵

"Responsiveness" can mean that the wealthy are able to influence the tax code in a way that reduces its redistributive nature, that they can modify regulations inhibiting their power of wealth creation etc. If we cherish democracy, we should implement policies that limit the risk of selfish interventions by disproportionately influential individuals or groups, as well as policies that en-

¹⁵ "Economic Inequality and Political Representation", Larry M. Bartels, August 2005, http://www.princeton.edu/~bartels/economic.pdf

courage participation of relatively less influential individuals and groups. Reducing income inequality is one possible policy, although one could also, for example, try to limit the effect of wealth on policy by way of campaign finance restrictions.

Income inequality may also lead to **social fragmentation**, with negative consequences for the **cohesiveness** of a society.

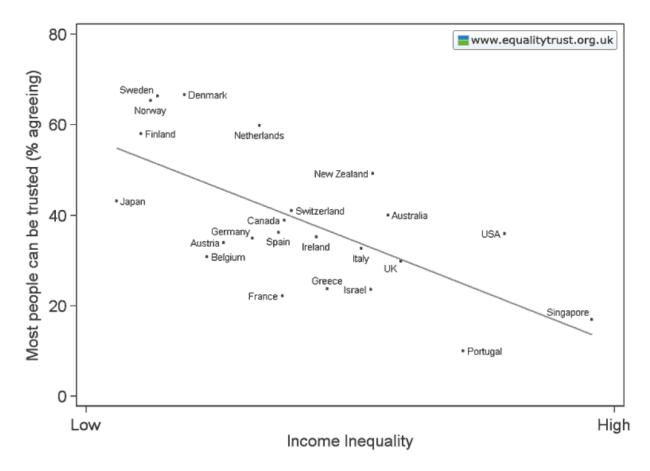
Community and equality are mutually reinforcing... Social capital and economic inequality moved in tandem through most of the twentieth century. In terms of the distribution of wealth and income, America in the 1950s and 1960s was more egalitarian than it had been in more than a century... [T]hose same decades were also the high point of social connectedness and civic engagement. Record highs in equality and social capital coincided. Conversely, the last third of the twentieth century was a time of growing inequality and eroding social capital... The timing of the two trends is striking: somewhere around 1965-70 America reversed course and started becoming both less just economically and less well connected socially and politically. Robert Putnam¹⁶

If some groups sense that society in unfair to them, then fragmentation can result in instability and even violence. Very high levels of inequality may be socially and politically disruptive, especially when people believe – correctly or not – that many have earned their high income in unjust ways or in ways that are not based on effort and talent.

The fragmentation problem surfaces in the data about social trust. People trust each other less in unequal societies¹⁷:

¹⁶ Robert Putnam, *Bowling Alone*, Simon & Schuster, New York, 2000, p. 358. Graph is from http://www.bowlingalone.com/ and http://en.wikipedia.org/wiki/File:Ginivs social capital in USA.jpeg

¹⁷ Richard Wilkinson and Kate Pickett, *The Spirit Level*, Penguin Books, 2010



Inequality can also lead to **financial instability and economic crises**. Some¹⁸ have argued that inequality was one of the causes of the recession of 2008/9. Unequal incomes during the decades leading up to the recession led to high savings rates among high-income individuals and high borrowing rates among low-income individuals, especially in the US. Financial institutions and regulators encouraged this process, creating a dangerous credit and housing bubble, which eventually burst. Middle class and poor people were in fact deluded or deluded themselves into thinking that they were more affluent than they were.

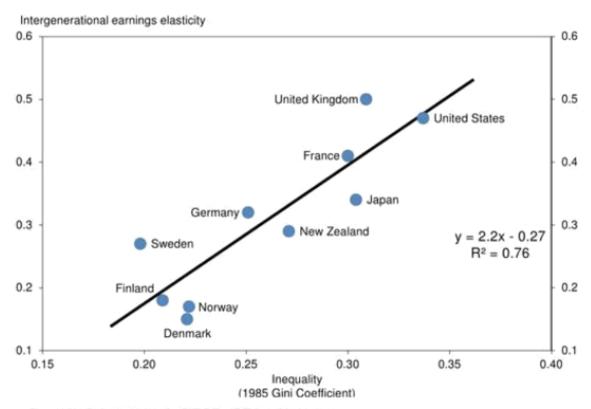
[The bubble] disguised the impact of the enormous inequalities that were emerging. This extraordinary financial system that the connivances of successive American administrations and Congresses developed, which overtly compensated for the weakness of the American social safety net and the emergence of this inequality, made people happier to live with a raw social deal. Will Hutton¹⁹

However, the causes of the 2008/9 recession are probably somewhat more complicated than that. Inequality may not have been the most important element.

¹⁸ Raghuram Rajan, Fault Lines, Princeton University Press, 2010

¹⁹ http://fivebooks.com/interviews/will-hutton-on-fairness-and-inequality?print=

High inequality is correlated with low **social mobility**. The data²⁰ show that highly inegalitarian societies, such as the U.S., are also societies with relatively low levels of social mobility. One could argue that income inequality isn't problematic when everyone has the same chance to be on the good side of the inequality, given equal investment of effort. But when inequality is combined with social rigidity and stratification, it undermines meritocracy and equality of opportunity. To the extent that mobility is good, lower inequality is good as well.



Source: Corak (2011), OECD, CEA estimates

The "intergenerational earnings elasticity" in this graph is a measure of correlation between the income of grown children and their parents, or – in other words – how much a rise in your father's income affects your expected income; higher values suggest less mobility, 0 means that the kids of rich people earn as much as the kids of the poor.

What is the mechanism here? In part, high levels of income inequality make social mobility more difficult: when income inequality is relatively high, people at the wrong end of inequality can offer comparatively less opportunities to their children than the people at the right end – less quality schooling, less quality healthcare etc. The children of wealthy parents have more advantages compared to poor children then they would have in a less unequal society, and they are therefore more likely to end up in a high income group as adults. I assume that social mobility is a good thing and that people's income should not be determined by the income of their parents.

²⁰ "Do Poor Children Become Poor Adults? Lessons from a Cross Country Comparison of Generational Earnings Mobility", Miles Corak, Forschungsinstitut zur Zukunft der Arbeit, Discussion Paper Series, IZA DP No. 1993, http://ftp.iza.org/dp1993.pdf

There's a series of **other potential outcomes** of income inequality for which the evidence is inconclusive. Income inequality may lead to health and family problems because of increased status competition and the stress that follows. If there's an effect like this, it's probably very small.²¹ Richard Wilkinson and Kate Pickett have stressed these effects, but the correlations they found were often weak and influenced by outliers.

It's tempting to conclude that high inequality must result in higher levels of unhappiness since people tend to assess their wellbeing relative to others. However, the data on this is sketchy at best:

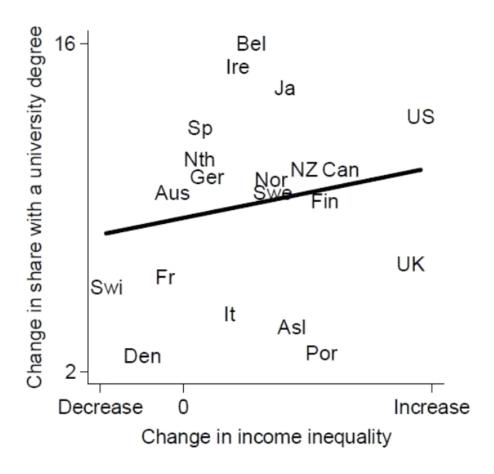
There is no evidence that equality is related to happiness. Indeed, the proponents of greater income equality admit that they are unable to cite such evidence and instead rely on very unsatisfactory forms of indirect inference. The clearest determinants of wellbeing would seem to be employment, marriage, religious belief and avoiding poverty. None of these is obviously correlated with income equality.²²

Another problem that may result from higher income inequality is educational attainment: when there are more rich people who are, in addition, increasingly rich, then they may be able to bid up the price of tuition, making school unaffordable for middle and low class individuals. However, according to some data²³ this claim looks rather weak given the fact that increasing inequality doesn't seem to result in less education:

²¹ http://www.u.arizona.edu/~lkenwor/soc150b1-isrisingincomeinequalityaseriousproblem.pdf

²² http://www.iea.org.uk/publications/research/and-the-pursuit-of-happiness

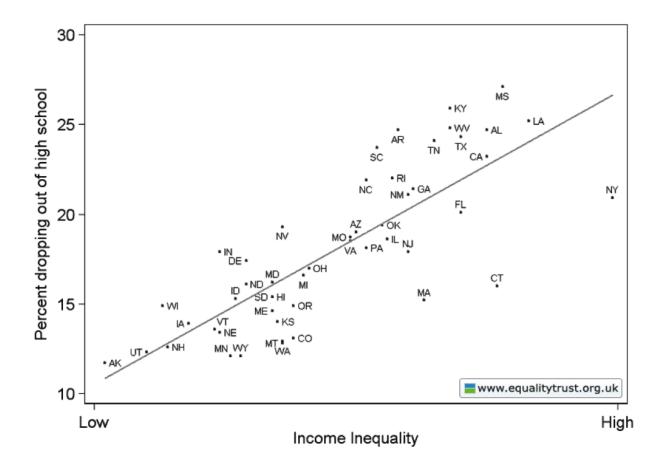
²³ http://www.u.arizona.edu/~lkenwor/soc150b1-isrisingincomeinequalityaseriousproblem.pdf



Source: Christopher Jencks and Lane Kenworthy, *Should We Worry About Inequality?* (forthcoming), using data from the Luxembourg Income Study Database, the World Top Incomes Database, and the Barro-Lee education database.

And yet, looking at dropout rates, there is a clear correlation²⁴, at least in the US:

²⁴ Richard Wilkinson and Kate Pickett, *The Spirit Level*, Penguin Books, 2010



To round up: income inequality does seem to produce a series of negative social consequences, although not always in the areas where we tend to assume that it does. Policy proposals to reduce income inequality are therefore partially vindicated. However, given the nature of those consequences as well as the obvious benefits of some forms of inequality, policy proposals should focus not on an across-the-board reduction of inequality but on detailed remedies of specific harmful consequences of inequality.