

I have heard a bunch of criticism of the Spirit Level book based on its "sample" and "cheery picking". I've decided to ignore that, and to read the book on the merits it gave in the text. Given this how did I find it?

Warning, this is an exceptionally long post given that I am putting down brief notes on each chapter (the review is over 4k, the summaries just that again). I have signposted sections so if there is something you want to swing to (tl;dr, conclusion, general issues) you can swing to that. Also note that I link to an excessive number of old posts from the blog – essentially many of the ideas noted down over the last few years here will come in useful for reviewing the book.

I have also explicitly avoided reading other people's reviews – except for the postscript that I have written later. As a result, I can't promise I've added anything, but I can promise that I'm being honest in my views :)

### **Tl;dr**

I have a list of concerns – excluding anything about the “countries in the sample”:

- Hypothesis changes and language gets mixed up – argument is generally unclear and in a sense untestable as a result.
- There are occasional untruths about what the “inequality measurement” is – and their treatment of income is inconsistent.
- Outliers do matter.
- Overconfidence of result – especially given that the lack of “structure” hits the policy relevance of what they are saying.
- Causation is a mess, and they haven't been able to adequately deal with “alternative hypotheses”.
- On a literary level, the constant appeals to authority, overuse of barely related anecdotes, and lack of clarity in sections of the writing make it a unpleasant read – especially if you are trying to read it to distil their argument structure which is variable.

Conclusion: Contrary to what they say, this book is not “science” (in the way they try to make it sound – I don't want to fight about “what science is” as I'm not the one defining it for the book!), it is thoughtless “silver bullet” posturing dressed up as analysis.

### **To the review!**

To review the book, I really need to frame it as an argument.

### **Base book argument**

1. Static inequality of income is correlated with negative health and social outcomes in a cross sectional analysis (across countries, and across states in the US)
2. Therefore, reducing income inequality will improve health and social outcomes.

This is the very base argument, but they do attempt to give it some structure. Specifically they go along the lines:

1. Static inequality of income is correlated with negative health and social outcomes in a cross sectional analysis (across countries, and across states in the US)
2. Static inequality causes a break down in trust, social stratification, and a changing in social norms through time.
3. Therefore, reducing income inequality will improve health and social outcomes.

The mixture of a static figure and a dynamic figure is a bit vexing. If I want to be generous (which I do) I would state they mean the following argument in the book, even though they don't frame it this way due to a lack of time series data (supposedly).

1. Static inequality of income is correlated with negative health and social outcomes in a cross sectional analysis (across countries, and across states in the US)
2. Static inequality is correlated with lifetime income inequality
3. Lifetime income inequality causes a break down in trust, social stratification, and a changing in social norms through time.
4. Therefore, reducing income inequality will improve health and social outcomes.

This hypothesis is not just reasonable. It is akin to the way economists view how the social preference for "optimal levels of inequality" will function. I can get behind that (to a degree – not as an absolute). As a result, we need to ask whether the "scientific" analysis they promise they are giving us helps to show that.

**Quick point on science:** I'm down with the Popperian view that we can't prove hypotheses, only reject them – and I'm down with the fact that in social science these come conditioned with protective sets of ceteris paribus assumptions. So I don't expect this to prove anything conclusively. However, the way the arguments are treated has a distinct bearing on how much we update our beliefs around the likelihood the argument may be true!

Now I have severe problems with how they have shown this, and with how they described it. You may look at me, [look at my job](#), and decided that this is due to my vested interests – I am an economist after all.

But before you judge what I am going to say on those credentials – it is important to note the large hippy streak I inherently hold. Specifically, I am a [long-term proponent of land tax](#) based on the [idea that all land is communally](#) held, but that we offer long-term leases to get the advantage of property rights. I term land-tax a [rent that provides a "social dividend"](#) that should be shared among all people – inherently I also believe in a [guaranteed minimum level of income](#) as a result.

Furthermore, I titled this blog. I gave it the name "the visible hand" because I see the government as a driver of good – it is a mechanism that people in society use to help us co-ordinate and create the

social structure we desire. Yes government can be corrosive as well, like other institutions, however they form a central part of our “social contract”.

On an ideological basis I am actually, in some ways, in the same camp that Wilkinson and Pickett are – a normative base I try to avoid thrusting down the throats of people that read the blog, where I try to instead force the idea of “trade-offs”.

And it is in this regard that the Spirit Level, with its disregard for the literature and data on inequality, and the poor data analysis involved, leaves me cold. Yes I personally believe in redistribution, and yes I believe that trust, honesty, and social capital are central parts of society. But the way the book tries to force all this into “income inequality” is not just flawed, it is likely to lead to more middle-class welfare rather than a real focus on the poor.

They are determined to describe a “free lunch” stemming from “magically lowering inequality somehow” – but without more structure they are on very dangerous ground!

### **Issues with the data**

It would be obvious for me to say there are severe data issue here – and I’m going to try to avoid going heavily down this path.

The first point to raise is that a lot of people have talked about the size of the sample, and the fact countries have been excluded that would influence the result. I haven’t been able to avoid hearing that point. I am going to ignore it.

They get points for sticking to the same series on countries the whole way through – and I am going to ASSUME this was the right set. This could well be wrong (many feel it is) but it will have no bearing on my review.

So what data issues did I have:

- Interesting interpretation – In Chapter 2 they say the following: ““When we reviewed all this research, a clear pattern emerged. While there was overwhelming evidence that inequality was related to health when both were measured in large areas, the findings were much more mixed when inequality was measure in small local areas”.”
  - They interpret this as strengthening their result as it is the impact of national inequality on communities. I read it as showing that, inequality excluding unobserved variation across the nations regions has no impact on health – as if we are looking at inequality “within a community” this is where I would expect a direct causal impact from their hypothesis to be strongest. This feeds into my later point – their “hypothesis” is actually a complete an utter mess, which they never try to tidy up. Note: I find this especially weird given the importance of status seeking to their explanation.
- The fit on the “index of all issues” is a lot stronger than for the individual indices – it is also an unweighted linear combination of indices from what I can tell. All of this is strange – why use an unweighted index, and why would outliers seem to “cancel out” in this way. I’ll give

them the benefit of the doubt on this, and just say that an aggregate index appears inappropriate.

- Outliers are a major problem: There are several places where the result would be a lot weaker if the outliers were taken out – they even admit as much, but then say “the fact that so many relationships with inequality are statistically significant, despite the limits to the data, is an indication of how powerful the underlying relationships actually are” – so they admit the result. The health obesity (chapter 7) chapter is the clearest examples of results relying on outliers. I would note that my old Hayashi Econometrics book says the following about highly influential outliers on [page 23 of this pdf](#): “In this case they should definitely be dropped from the sample” ...
- On the note of the above comment, they are saying the P-value is low even with low data so yeah! This comes from the idea that they are rejecting a null hypothesis of “no impact” with their estimation, and it can be difficult to reject the null hypothesis when there is little data. Essentially for a given mean and variance, the larger the sample size is, the more likelihood we place on the mean of our parameter (in this case the coefficient on the impact of inequality on or social ill of choice) being different from the null (of it being zero impact). Here is the kicker, in small samples it is pretty difficult to say whether we are near convergence to the “mean” and “variance” of the “underlying model” – I am going to assume they recognise this and are basing the confidence they have in their book on the breadth of research or some such. What I would keep in mind is this makes their estimated result VERY responsive to new data – and to adjustments to outliers ... the very factor they were so dismissive about in their postscript. [**Note:** I’m not going to get into a debate about the usefulness of P-values in general, or the problems with statistical significance – that is important, and for broader academic debates, which should be based on the papers rather than the book per se].
- Talking about the obesity result, we have the following. As the causal mechanism we are told that status seeking leads poorer people to put on weight and wealthier people to lose weight (from what I can tell in this). Just obesity rates in the wealthy are said to be higher in unequal countries – shouldn’t weight inequality be higher to be consistent. I can never really tell – as the hypotheses they use change far too often, and SHOULD be defined more clearly.
- Subjective indices of outcomes - how trust worthy are they? I’m an economist, we generally have concerns about reported results relative to “[revealed preferences](#)” – people will say they want more, and that they want society to change NO MATTER what type of society we have! People just want more.
- The mental health result (Chapter 5) was found to not be significant (was due to US outlier in global work – although extended in the postscript, within the US didn’t hold). However, it was taken as a given result during the rest of the
- Their data description has a sneaky little qualifier in it – they use Gini coefficients over net household income. They show their “income” comparisons off a different base, gross national income per person. This is pretty cheeky, net household income and GNI (which

has your government spending from tax, and business spending, they are all loitering in that) are completely different series. We will touch on how this may have had an impact when we note “alternate hypotheses” that they didn’t seem to touch on.

## General issues

These issues are other concerns I ran into:

- **Lifetime, not a point in time:** Their argument is about a dynamic breakdown in trust and social structure solely due to income inequality. They need a dynamic look at the data – they need to look at time. I find it strange they say the data isn’t there – the World Bank has [Gini figures going back 30 years](#), and if you dig into countries there are broad data sets that give you a time dimension. Cross-country comparability gets tough – but the argument is about a dynamic process after all.
- **Multivariable analysis:** Seriously, they need to correct for confounding factors. Yes, we do need to be careful with the causal chain – and theory helps with that. But this isn’t a reason to ignore omitted variables. If social stratification is the cause, show that. If inequality is influencing social stratification then show that, and build the process – don’t ignore the “structure” and rely on a “reduced form” model for policy conclusions! In other words the following quote is not a “methodological strength” – it is a “methodological failure”:

“Second, it is a fundamental methodological principle of epidemiological analysis that you should not control for factors which form part of the causal chain – in this case explaining how inequality causes a particular problem. For example, if we think – as we do – that societies with greater income inequality have worse health because poorer social relations increase chronic stress, then we would need to be cautious about how to analyse that particular causal sequence. Simply including measures of trust and social cohesion in a statistical model could remove the association between income inequality and health, even though it is likely that inequality actually leads to poorer health because it is socially divisive.”

- **Actually, lets spell it out – omitted variable bias:** If something else is positively related to inequality, and positively related to the social ill of choice, then not including it gives you an upwardly biased estimate of the “true” impact of inequality on the social ill. I didn’t think this was necessary to spell out – but some readers may not have run into [omitted variable bias or endogeneity](#) before 😊. The “true model” they keep describing is between social capital and trust ideas and social ills – so this should be what they include. If your argument is that inequality is causing the change in social capital, show that separately (Note how this increases the importance of “through time” analysis for the argument!). If you put both in, and inequality isn’t significant it is because inequality only has an impact “through” the social channel – you don’t avoid doing the regression in that case, you just interpret the data correctly 😊. I will be honest here, this is a horrible error – data limitations make this hard, but it should do a LOT more to reduce their confidence in their results. Univariate analysis on limited data doesn’t make a “strong scientific case” no matter how many times they say it in the book.

- **A loose version of the Lucas Critique:** Straight from above we come to the [Lucas critique](#) – well not quite, but a related idea :) . Essentially, the relationship between inequality and these outcomes is not invariant to the policies we use to get there. Think of it this way, the policy suggestions in this book are based on the first “argument” I have at the start (nom static income inequality to solve problems) – but the “structure” is based on the third one (lifetime inequalities based on certain relationships can influence trust and social structures, and we should try to ensure policy changes are consistent with their impact on these things using lifetime inequalities as a lens to understand them). We have an indirect reduced form relationship between these structural causes and static inequality – but unless the policies we use to target static inequality are the same ones we would use to target the structural model, we aren’t going to get the results we expect when we change policy settings. **Note:** Read this as “not all ways of changing inequality are created equally!”
- **Where is the panel analysis:** We have "time" and we have a "cross-section" - so we can do panel analysis of these issues. But that hasn't been done here. Using panel analysis would allow you to belt out the unobserved heterogeneity between countries! **[Note:** This isn’t perfect in any stretch, cross-country comparisons (where we are treating a country like an individual) are sketchy in general – this would still be an improvement as long as we recognise the shortcomings]. I would note something in their favour for ruling this out though – the small sample of both time and cross-sectional variables!
- **Timing problems:** There is a push in the book to add biological arguments – inequality creates stress which limits child development, which leads to inequality when they are adults. Hey I have sympathy with child development stuff for sure. But timing matters here – often they will make this explanation, then talk about changes in inequality having contemporaneous impacts ... the impact should be a generation down the line if that is really the cause. This is a careless error, and suggests the “biological science” isn’t really being applied, just thrown in for faux-authority.
- **Inequality indices:** This was a complete shocker – this single line annoyed me so much I had to go take a walk to make sure I’d come back to this book without a heavy bias at being lied to (Chapter 2): “There are lots of ways of measuring income inequality and they are all so closely related to each other that it doesn’t usually make much difference which you use”. This is complete false – it isn’t just a misstatement it is a dangerous lie, when our “goal” is to redistribute based on the measure we use!!! I found Frank Cowell’s discussion in [Measuring Inequality](#) to be pretty useful on this point – and the ways that different measures didn’t meet certain criterion.
- The book is very **confused between levels and rates of change** – repeatedly claims are made about “equality” then replaced with “changes in equality”. Constantly the book starts using “education” or “health” inequality interchangeably with “income” inequality – when actually they are supposed to be trying to prove this relationship. This is partially bad writing. However, during some points in the policy prescription section, this confusion actually makes their policy conclusions completely unclear – do they have a view on “optimal” inequality, is it just lower or is it complete?

- **Whatever the “hypothesis is” inconsistent, and as a result untestable and unscientific:** Adding to this is the idea that we can then design policy based on their recommendations. The hypothesis is often unclear, partial, there is a poorly defined structure, and the policy “benefits” they occasionally quantify feel like they are throwing a dart in the air. This could be the style of the book rather than the robustness of the underlying literature – but that is what I am reviewing. They also use this to attack random straw man arguments at strange points in the book – often acting like we don’t redistribute at all, I suspect this is again due to bad word choice.
- **Equality and heterogeneity of individuals:** They occasionally seemed to stray into the territory on complete equality on the basis of it being democratic. They even noted the idea of prices being democratic and the such. I have heard that before – [right here!](#) However, I’d note some extra things – individuals are heterogeneous and relative price levels change for the purchasing patterns of different income groups. We can’t “abstract” away from that and push for complete equality – heterogeneity is so insanely important, hell even if we were all carbon copies at different points in our lives we would STILL be heterogeneous! Policy needs to appreciate this – not just treat all income difference as akin to luck!
- **Note 2 on heterogeneity:** One of the biggest heterogeneities is the fact people value working, and goods and services, differently – their skill set plays into this, but fundamentally people value things different ways. Any view of “inequality” needs to take into account that some people want to work more to consume more – and some want to work less and consume less. This key key key point gets ignored too much, and choice never makes an appearance in this book.
- **Status goods are not just income – the authors don’t notice this:** For such an important, important, important issue the idea of status was treated very poorly in this book. If income can’t be used as a status good, people will find something else to use as a status good – this is human nature. Acting as if removing income inequality will cancel out status good competition EXAGGERATES any impact – this is a key point when they tell us cutting inequality will save 1.5 million lives ;)
- **The US-China comparisons:** They keep writing the US is more unequal, and as a result more selfish – which China is more communal and less selfish. Did they look at Chinese inequality numbers before making that claim multiple times? [[Wikipedia](#), [other](#), [other](#) – all first page of google]
- **The appeals to authority are grinding:** The book starts with the authors comparing themselves to the dude who pointed out that having doctors wash their hands would save lives. They then imply that if you disagree with them, it is like disagreeing with that which led that researcher to commit suicide. The strength of the appeals to authority do not ease back from there ... it made me skip chapters that seemed unrelated to the central thesis by the end. I would note that other people have told me they found it the same when I chat to them.
- **Anecdote overload:** A prison warden is a douche, and a 16 year old loves fast food – just the sort of long winded stories that prove your point when you haven’t bothered writing down a

hypothesis outside of "the level in inequality causes social ills and these annoying anecdotes". Again, this is probably a style thing – historians do anecdotes well, I just don't think social scientists have their skill with them :)

### **Oi, so what else can shift inequality that we should be looking at!**

The book mentions two causes – changes in technology and skill, and changes in social norms and government policy. It says the first is exaggerated, and the second is what it is all on! They only do this briefly, surprisingly.

Now there is a pile of work going on at the moment with people breaking all this shiz down. The two things that come to mind this second are "Income inequality in the United States, 1913-1998" by [Piketty and Saez](#) (2003) and "Levels and Trends in United States Income and Its Distribution A Crosswalk from Market Income Towards a Comprehensive Haig-Simons Income Approach" [Burkhauser and Larrimore](#) (2013). I've put down two articles that come to different conclusions – and my impression is more of the literature is currently behind Piketty-Saez (although the Burkhauser-Larrimore paper is new).

That is lovely and all, but one of the key things is that when we start breaking down the income distribution into causes we start seeing that there are many more causes – population aging, household structure, changes in relative prices (such that the change in nominal income distributions may not actually mean different real purchasing powers), changes in tax, benefit and labour market policies, changes in other policies (macroeconomies are filled with unforeseeable distributional consequences). This is in addition to changes in skills, education, broad technology (both [globally shared](#) and nation specific), and demand for skills types.

Making the argument sound like there can only be two causes of changes in the inequality distribution allows them to exaggerate the policy relevance of what they are saying. If they actually had to go to the source, trust, status competition, and social capital the "solutions" would be as easy (although they would have a lot more validity). This is a FUNDAMENTAL methodological issue with what they are doing – reading this entire book, and seeing how they talked about inequality, it just sounds like they don't understand the variable they want society to control. This is damning.

### **Alternate hypotheses:**

- **Risk loving behaviour is correlated with both inequality outcomes** (dispersion of wealth) and many of these "social harms". Given all the data is cross-sectional, it is hard to rule out that risk loving is the cause of both (a confounding variable).
- **Institutionalised status seeking, social stratification, strength of social contract causes income inequality:** The treatment of causality in the book was poor – chapter 4 was the only time they mentioned a causality test, and this was in terms of the trust index. Supposedly some academic sociologists raised concerns that the causality could run in the other direction (from the postscript) and I agree with this.
- **The poor data structure is confusing poverty and inequality** - inequality for a given average income implies MORE poverty for that income. Needs to be corrected for.



- **The poor data structure is confusing income and income** - for a given level of income, if governments share of income is larger, measured inequality will be lower but their "income measure" (GNI per cap) will be unchanged. As a result, this could just represent "more government intervention" a confounding variable that needs to be accounted for. In Chapter 13 they say they accounted for government expenditure in some places. I realise this is for the public but just saying "even accounting for government spending" whenever you did that would HELP your argument with everybody – as it is I have to assume this was often ignored (especially given the authors point that they don't include confounding variables).
- **Not culture, but homogeneity:** They rule out culture as the cause – fair enough! But hasn't there been a lot of talk about more homogenous societies having greater equality and stronger social bonds – can't the homogeneity due to being with "similar" people create a situation where society "chooses" more equality. The areas they "group" and say aren't culturally similar are similar in terms of homogeneity – so this is actually a powerful alternative. And I don't find it that morally compelling, as I wish there was a way for humans to find "others" as more akin to themselves! Now personally, I am picking that the authors have realised and looked into this – but the postscript could do with an update to mention it and why it is inappropriate!
- **The lack of time missing the "causes" of changing inequality:** I find it insane how inequality is said to be the "cause" of everything – and not the result of anything. Especially since the distribution of income and measured inequality is an issue that economists have spent much time looking at "causes" for. Eg here [is a paper](#) I read last week from Motu, dealing with the causes of the changing income distribution between 1983 and 1998. A lot was put down to changes in population and household structure – instead of policy change. Now I appreciate the idea that inequality and other things can be a two-way street – but there wasn't the slightest effort in this to try and understand "what the difference in Gini coefficients between countries" actually represents ... as this is actually a f'ing hard question. It can be hard to compare Gini coefficient between countries – the Gini coefficient represents the area between the "equality line" and the Lorenz curve for the income distribution, and Lorenz curves can "cross". This implies that countries with very different income distributions could have the same Gini coefficient!
- **Modern technology is the cause of dehumanisation:** Or our relation to it – I recently read [Zen and the Art of Motorcycle maintenance](#), and so the idea that progress has led us to be disenfranchised is sitting in my head. Aha, but shouldn't this have occurred across all countries! Well if we had overtime comparisons we could look at that – but we would still need to think about how this process in turn relates to our institutions within society. Could even add that, increased wealth and capital concentration due to technology increases inequality AND as a result this is what we could see driving the result – could test this by actually looking at measures of capital intensity and the such though. Key point, "many shifts" in the constant changing state of nature could be confounding variables in here, need more data to truly break it all up :)

To be honest, I find many of these alternatives more compelling than “inequality stuff did it” – but testing any of them in a satisfactory manner, including inequality, is danged difficult. Given this, I am amazed at the confidence they have in their own results ...

### **Conclusion: My concerns given the hypothesis**

How is this result being interpreted? Just the way they want it to be – that changing inequality has a mystical magical impact on these social outcomes. Not only has this not been shown, but it merely leads people to stop thinking about the *hard issues and trade-offs* in order to try to *push a button* that fixes everything.

It just so happen that this button involves more transfers to the middle class (hello [directors law](#)) and less focus on the specific issues that exist in the health and education system. Now, the people that really get disadvantaged from this change in focus are the poor – and the people that win are the middle class people who received income transfers as a way of *helping them deal with the stress of other people being richer than them*.

Let that sink in, this is what the book is fundamentally saying. It is a non-scientific book (the number of data and statistical concerns indicate that) that supports transferring resources and policy effort towards the middle classes.

It is not an objective analysis of the way we build up trust and cooperation in society – which is unsurprising as that would be a very difficult thing to do a full analysis of. However, it pretends it is doing that – instead of placing its flag in the ground and admitting the trade-offs involved with the specific programme of redistribution they are pushing they want to make they pretend there are none. Lovely.

Now do not get me wrong – many of the policies that we may decide to put in place to help groups will knock down inequality. The idea that, as a community we should try to build up trust and social capital is true. The idea that progressive tax and transfer policy, that represents the social contract, can help in this end is also acceptable. But this book doesn't show that – instead it gives a misleading idea that targeting one variable will create great happiness, the sort of blind ideology that leads to social harm.

### **My postscript - reading what others have said**

I still haven't read anything – and I'm pretty tired from putting together this review! I will check other reviewers and write about what they have said in a separate piece in a couple of weeks. However, here are some links that I have been sent:

- Andrew Leigh [here](#).
- [Spirit level delusion](#).
- [Patrick Nolan](#) (hey my brother!).
- [CIS](#).

Does anyone have pieces supporting their research – more stuff against them is fine, but I'd like to also see work challenging some of the concerns I've run into here.

## **Appendix chapter summaries**

Here I will give you the brief notes of the chapters, and comments I had while reading those bits. This will hopefully add to what I have discussed in the review, rather than contradict it ;)

### **Prelude**

- They come from health inequality research – epidemiology related methods.
- “At an intuitive level people have always recognised that inequality is social corrosive”.
- They suggest following data even if we can't explain why – example of doctor washing hands

### **Chapter 1**

- Need a focus on psychological wellbeing instead of just GDP (no economist would disagree in principle).
- Statement of hypothesis: “we will show that the scale of inequality provides a power policy lever on the psychological wellbeing of us all”.
- Blabbing on income and happiness is irrelevant – already highly empirically falsified. Although again agree that the “goal” is not GDP. Furthermore, trade-off isn't between growth and inequality – it is between level of income and inequality.

### **Chapter 2**

- “There are lots of ways of measuring income inequality and they are all so closely related to each other that it doesn't usually make much difference which you use” – this is incredibly false, holy cow. However, doesn't influence overall argument per se – just not a nice statement.
- Personal note: At this point would be nice to separate “inequality” impact from “low income” impact on outcomes – as they state low income is associated with these negative social outcomes. Poverty is a confounding variable at this point – need to make sure they make this clear :)
- Health and social outcome index is a touch random – equal weights across disparate social outcomes? What does it really mean? (They do say they will separate out – good)
- The inequality index is in net household income – the “income” comparison is average national income (fig 2.3). There is no correction for social spending OR the fact that for a given average income (and given policy settings) poverty/low income is greater for the unequal country, making poverty the proximate cause (instead of inequality). Keep an eye out for this to be explained.

- “In chapter 4-12 we will examine whether each problem is related to inequality and will discuss the various reasons why they might be caused by inequality”. Great, ex-post justification instead of testing alternate hypotheses – this is a big methodological problem. Still, see how they do it.
- Argument about relative position and status goods – this is legitimate.
- “Where income differences are bigger, social distances are bigger and social stratification more important” ... my note: we actually need a view on mobility for this, and lifetime inequality – not just static Gini coefficients. It is a broad principle that I don’t disagree with though.
- “When we reviewed all this research, a clear pattern emerged. While there was overwhelming evidence that inequality was related to health when both were measured in large areas, the findings were much more mixed when inequality was measure in small local areas”. They interpret this as saying it is broad social structures across society causing health issues in smaller regions. I interpret it as saying that, when controlling for other variables by narrowing the geographical scope the inequality result GOES AWAY.
- A lot of rhetoric without substance – look past this – say you are ignoring that, as its no doubt written this way to be like a pop book.

### Chapter 3

- Social structure influencing individuals – fair starting point.
- States increase in anxiety (work by Jean Twenge) – interesting, but claim that 1980s kids are as anxious as psychiatric patients from 1950s seems strong. They note that isn’t solely due to inequality – appears to start prior.
- Rise in narcissism placed down here – used to justify favouring of status goods, protecting the “view of self”.
- Breakdown in identify and community that provided it.
- Matt Note: Link between this and inequality? Or is it a cofounder? Inference that status is only on income is a stretch in modern age – people choose to be low paid musicians for a reason!
- States that Japan is more equal and more modest – US less equal less modest. Blames lack of modesty on inequality. Ummm, what! (Especially when then stating that the Japanese pattern was in China – one of the most unequal countries on earth!!!!)

### Chapter 4

- Again with the US-China comparison – ignoring inequality is worse in China.
- Social relations deteriorate in “less equal” society – states that it forces us to treat other income groups as the “other”. Matt question – who do we view as the “other” if this wasn’t

the case, the historic comparisons had much larger sexism and racism than we have now, is it just a fault in human nature to make an “other”?

- Negative correlation between trust and inequality (they put the causation from inequality – but doesn’t it work both ways given govt policies are endogenous to trust and the social contract?)
- US gap correlation for trust to inequality is more compelling to me – although state level redistributive policies are important to think about.
- Uses Robert Putnam (Bowling alone) to justify how they are “mutually reinforcing”. Inequality eats into “social capital”.
- Bo Rothstein as showing inequality leads trust. [Note: Still static measures for a dynamic argument – would be nice to at least mention the idea of lifecycle inequality instead]
- Trust to cooperation – stating that breakdown in trust due to rising inequality causes breakdown in cooperation.
- Stating that inequality also correlates to lower women status – note that this includes earnings, so when half your population has relatively lower earnings higher inequality is a product of it. As a result, ignore this one.
- They note that, in trust, poverty in of itself is not as strong a factor – they should really be fleshing this one out more!

## Chapter 5

- The mental health data is only cross-country, not time series.
- The mental health is due to inequality data doesn’t hold between US states.
- After even pointing out the data wasn’t there – they’ve just assumed it is the result. Ahh “affluenza” is the problem – and Frank’s “luxury fever”. Sorry, the 1950s was packed with this during a time of massive equality ... this is not compelling.
- Inequality and drugs – I don’t even see an argument here other than extending the mental health argument that wasn’t made.

## Chapter 6

- Low social status causes negative health outcomes.
- WTF, the US is an insane outlier driving the entire result of “no relationship between health spending and life expectancy”. This suggests there is something insanely wrong with the health system in the US – or something linked to it (dudes, your food is pretty much insane).
- Is there no chance that instead of inequality causing lower health outcomes, they can both be explained by heterogeneity in individuals. Being endowed by poor health reduces your relative earning capacity ...

- So inequality reduces the health outcomes of those at the top as well ... really ... are you sure you aren't missing a confounding variable here??!?!?!?
- Life expectancy rose during the two world wars at a faster rate than between and after ... this is very fishy. [Note: They are also saying nutritional status improved due to rationing, what]
- Stresses of inequality cause lower life expectancy now – even though stresses of WAR increase it. Note I agree that stress reduces life expectancy, that is well shown.
- Uses Russia as an example of place moving from central planning to market economy and thereby lowering life expectancy – hold the f up. We know the pre-wall collapse data wasn't necessarily reliable, and I'd hardly call Russia a market economy ... more like an oligarchy.

## Chapter 7

- Weight distribution switched from positively related to income to negatively related.
- Relationship between obesity and inequality again looks pretty heavily skewed by US ...
- They note that link is likely due to stress (highly believable) – so relies on link between inequality and stress. This should be in turn testable. I would note we can slot this directly in with addiction – so again relies on the mental health argument that was so weak.
- They note that fast food is a status symbol for the poorer.
- The link between socio-economic status (note not inequality) and obesity appears to be a female only phenomenon.
- They make argument about how fuller bodied women used to be seen as more attractive – isn't this a debunked urban myth?
- Weight as social status is different in different groups – ahh this isn't a particularly clear passage or mechanism (no answering why). Piling into anecdotes from 16 year olds on the street :P
- Seems to be implying that “low” weight is treated as status symbol by wealthy, but the “obesity” problem is said to be spread across society, so the status argument isn't holding? (Claim on it being spread made again in Ch13)
- Argument: Societies with more stress lead to babies with low birthweight who view food as scarce and so eat too much. Note: This may make sense for obesity, but not so much for the idea of wealthier people being thinner – as the stress is supposed to be “spread”.
- They suggest that it was the increase in inequality post-Berlin Wall falling that led to rising obesity in East Germany ... what the shiz.

## Chapter 8

- Inequality and educational scores are closely related: No shiz – if they don't deal with causation this is a disaster of a chapter. [Note relationship is weaker than my priors suggested]
- Drop-outs positively associated with inequality.
- Educational inequality related to educational performance – said to be given by outside literature. Also they keep mixing “educational” and “income” inequalities implying they are the same thing. Need to be more careful.
- Link is that inequality causes stress, which reduces educational opportunities and performance – aha. Poor parenting is implied to be a response to income inequality.
- They note that castes, and status, announcements can help lead to differentials in performance – note this is a general concept about how groups form, it is not solely about income (eg if the income inequality went away, people would find another way to rank themselves). The REAL result is that announcing and observability have this signalling effect.
- Argument that class status influences opportunity – this is true. The solution is dealing with opportunity and attitudes in the community though; increasing social mobility ... this would come up by peaking at some of the longitudinal studies within countries :)
- Inequality leads to higher aspirations for work (expecting high skill instead of low skill). Ok, wtf, result driven by Japan – AND this is skills not status, it is not necessarily a bad thing. “If inequality leads to unrealistic hopes it must also lead to disappointment” – holy shiz wtf.

## Chapter 9

- Teenage birth rates are higher among the poor.
- Higher in Anglo-Saxon, opps I mean unequal societies.
- State high teenage birth rate in unequal countries is due to lack of trust. Especially noted “absence of father” – mothers relatively close relationship to child, desire for child, as a result.

## Chapter 10

- Inequality increases incentive for status seeking, leading to more violent behaviour (which is an act of status seeking).
- Relationship exists – but again, US is ridiculous outlier.
- State that violence comes from lack of fathers – relies on inequality breaking up families.
- State that violence, crime, and teenage pregnancy have all moved with inequality in the 80's, 90's, and 00's – falling then rising. No time series shown though.

## Chapter 11

- Inequality explains imprisonment rates better than crime rates – note: this is the clearest argument that confounding variables are the cause and not inequality FFS (why, as countries that institute more punitive punishment are likely to also institute similar welfare policies, increasing inequality EVERYTHING ELSE equal).
- They make claim unequal societies are more punitive as well. Note, this is set in policy – this isn't the result of inequality but one of the causes!!!!!!
- Note: At this point the random, barely related, asides and anecdotes (instead of ya know, actual evidence) they are using are making the book close to unreadable. It is starting to get boring. I don't see how the fact a prison warden is a douche adds anything to their argument ... Joe Arpaio.
- Argument that prisons can be counterproductive – true but absolutely irrelevant to their thesis.

## Chapter 12

- Finally, they will cover social mobility and opportunity – the big issue for economists!!!
- State that longitudinal data is hard to come by – although tbh if you look it is around ;)
- They compare 8 countries with social mobility indices. They compare them with STATIC (end point) income inequality. They pretend there is a result – in truth it just says mobility is lower in the US and UK than it is in Europe and Canada.
- The ratio of public expenditure on education, and the correlation between father and son earnings, indicate that mobility in the US has declined.
- Concentration of poverty has increased (they say this is due to inequality – that is a stretch, it is policy relevant in itself).
- An excessively long blah on the fact that different groups try to signal status using wealth with no data.
- “In more unequal societies, more people are oriented towards dominance; in more egalitarian societies, more people are oriented towards inclusiveness and empathy” – ok when the hell did you actually make this case??? They've actually just included this and pretended they've made the case for it.
- “health of ethnic minorities who groups who live in areas with more people like themselves is sometimes better than that of their more affluence counterparts who live in areas with more of the dominant ethnic group” – people tend to move towards “others” they relate to, I don't see how this is relevant to equality of opportunity being impinged BY income inequality. It isn't due to income dispersion, it is an underlying factor.
- “Bigger income differences seem to solidify the social structure and decrease the chances of upward mobility. Where there are greater inequalities of outcome, equal opportunity is a significantly more distant proposal”. What I'm struggling with is they never actually made or



tested these claims – it is like they wrote them down, then included a pile of filler that “proves” it by unrelated anecdote. They have shown that inherently different groups impact upon mobility – and suggested that mobility has fallen back in the US context recently. Nothing more.

### Chapter 13

- Continuing to claim that the negative impact is on society as a whole.
- Arbitrary unweighted index or indices correlated with static income inequality ;)
- Claim that more “equal” countries have lower working age population death rates.

Alternative hypotheses:

- English speaking countries: They rule this out as there is still a relationship between them, and because Portugal also sucks. Same deal with Nordic countries – get rid of them and still have relationship in funky index.

Ok, that was it. Onwards

- Get equality through tax and transfers, size of govt etc doesn't matter. Note: This is a strange claim, and their “data” is subject to the Lucas Critique as they have no “structure”.
- “For countries in our international analysis, we collected OECD figures on public social expenditure as a proportion of GDP and found it entirely unrelated to our Index. Perhaps rather counter-intuitively, it also made no difference to the association between inequality and the Index”. [So they did a multivariate analysis here?]

Alternative hypo again

- Ethnic divisions: Taken as status marker. They state that they haven't tried to correct for it – and since it is the same process we will treat it in the same way. Note: Hmmm
- Breakdown in traditional family unit: No relationship between number of single-parent households and child wellbeing.
- History dependence: I don't see what the criticism is or their response, this is all blah
- **Causality:** Since it has happened on so many variables it must be true. Also with the little time series available we can say things like ‘the US and Japan swapped places on life expectancy’. They also say they have ruled out govt expenditure (would like to actually see that in detail) and that it is unlikely there is some other catch all factor – I think they are missing the point a bit here, inequality could be set due to a myriad of policy and choice factors that are correlated. It is not inequality itself that needs to change, but a range of government schemes in that context.
- They touch ideology: Discuss in a broad way that this isn't that important per se as there was no intention to worsen outcomes – they don't seem to quite get the idea of ‘packages’ of policies in the face of funding trade-offs.

- They note the caste/status evidence as evidence of causation for income inequality – actually it is just evidence of status. Note: Removing the inequality does NOT necessarily solve the status seeking.
- Push to state that the chain of logic is inequality hits social capital – therefore it worsens outcomes.

## Chapter 14

- Focus switches to “how greater equality is attainable” – stated that greater equality, in of itself, is now proven to be desirable.
- “Far from being impractical, the implications of our findings are probably more consistent with the institutional structures of market democracy than some people would like to believe”.
- “We need to understand how ... greater equality allows a more sociable human nature to emerge”. Note: This link should have been made earlier.
- “Systems of material or economic relations are systems of social relations” – again no shiz tbh :P
- “The egalitarian preferences people reveal in the ultimatum game seem to fly in the face of the actual inequalities in society” – aha this is nonsensical. Ultimatum game shows an inherent preference for “some” level of redistribution, society DOES involve “some” redistribution. They are working too much in “absolutes” with their description which makes the argument misleading.
- Make claim that “modern inequality arose with the development of agriculture” – they are taking this as evidence that society is less egalitarian than it was with hunter-gathers.
- “Our tendency to feel a common sense of identity and interdependence with those with whom we empathize and share a sense of identity” – implying that income and resource equality causes people to view themselves as part of a group. This is essentially the thesis – very likely backwards!
- State, effectively, that morality and fairness views about society are formed when a child.
- “Many of the problems which we have seen to be related to inequality involve adult responses to status competition” – this seems to be the more general cause, Si.
- Then state that inequality impacts upon children – surely this actually indicates that active policies for children are actually what is more important rather than indirect redistribution?
- Lots of loosely related blah about chemicals stimulating pleasure and how not having friends makes you sad.

## Chapter 15

- Note: They still haven't said "how" to redistribute at this point – even though they promised ;)
- Here is what I am guessing this chapter will say – reducing inequality reduces "status good" competition (Veblen goods), and leads to easier "co-operation" thereby solving global warming ;)
- I can't really be bothered reading this chapter – and it is standalone, so skipping.

## Chapter 16

- State that thinking about inequality domestically doesn't mean ignoring global inequality – a more trusting society will be more generous. Note: I would be more careful with the margin, but agree we can separate the question UNLESS there is a common cause (labour mobility).
- Some stuff about transformation – this isn't particularly "clear"
- "It is often said that greater equality is impossible because people are not equal. But that is a confusion: equality does not mean being the same" – no the confusion is between a change and a level, and it is on the authors part.
- "Nor – as often claimed – does reducing material inequality mean lowering standards or levelling to a common mediocrity" Ok, you haven't show this and the real evidence suggests this is wrong.
- "Wealth, particularly inherited wealth, is a poor indicator of genuine merit" – this is mixing issues again
- "People are now more likely to see psychosocial wellbeing as dependent on what can be done at the individual level .... However it is clear that income distribution provides policy makers with a way of improving the psychosocial wellbeing of the whole population". This is their claim – it is unproven.
- "The glaringly obvious fact that these problems have common roots in inequality and relative deprivation disappears from view" ... sigh
- They state that, since income inequality has risen so much between the 1970s and the 1990s we can easily make it change back. Note: This does depend on the cause right.
- Notes that Krugman blames changes in "institutions, norms, and political power" as cause of changes in US income inequality. Arguing against changes in relative skills essentially.
- Can have redistribution through taxes and benefits and "through a large welfare state, countries like Japan manage to achieve low levels of inequality before taxes and benefits". Note: I thought they rule out the impact of social expenditure earlier? They go on to note that social expenditure can in turn be increase as you "pay to deal with harms" ... hmm

- Problem is that society and politicians have “lost touch with what really matters”, surveys say. Note: I bet, if there were surveys about this 40 years ago, people would have said the same thing dudes.
- They note 60% of Americans want more redistribution. Note: middle class wants more middle class welfare – no way!
- Corporates owning govt, blah blah blah.
- State they think more co-operatives, non-profits, and government run organisations will lower inequality – surely this is a “industrial economics” issue a bit more! Lens of competition necessary.
- Some stuff about increasing progressivity of tax system – yup by definition this should reduce inequality.
- Weird stuff on “employee ownership models”. Ok, if they want to purchase the capital and land that is fine – that stuff aint free guys. They really like employee owner firms ...
- Attacking idea that freedom and income equality contradict, fair enough. “The truth is that modern inequality exists because democracy is excluded from the economic sphere” – ok that is a pile of horse shiz. Do they NOT UNDERSTAND individuals are heterogeneous!
- Complaint about the current structure of patents – this is true. Their solutions are naff, but many economists are concerned about that.
- ‘History is on our side bullshiz’

### **Postscript**

- They state that some studies cited did estimate impact of inequality allowing for the impact of changes in income.
- They state academic sociologists were surprised the book focused on income inequality and not social class classifications – they defend this on the basis of incomparability of data. Fair in that respect. However, the underlying issue of “cause” isn’t touched – that classifications are the cause of observed inequality rather than being a product of.
- They compare themselves to a bunch of other areas saying that criticisms are just trying to fight against scientific evidence – ahhh hmmm
- “It is now extremely difficult to argue credibly that these relationships don’t exist” – have any of the 200 papers actually gone along the road of causation. You are suggesting “policy intervention” based on something you don’t “understand” – there is still an implicit structure that isn’t being thought about!
- Stuff about dataset structure – this is an issue I am leaving to the side both ways :)

- They argue the “cultural difference” perspective is relatively flawed. “Culture” is used as a catch all description without definition. I agree here. Homogeneity of culture is a different story – and they don’t seem to touch it.
- Defending outliers and statistical significance: “Our results are, sometimes sensitive to exclusions simply because we are looking at a limited number of countries, but the fact that so many relationships with inequality are statistically significant, despite the limits to the data, is an indication of how powerful the underlying relationships actually are”. Go to town on this Matt – holy moly
- “There were several reasons why we chose not to include other factors. First, we wished to present the simplest and most understandable picture of the correlation between income inequality and health and social problems, so the readers could see the strength of the relationship for themselves.”
- “Second, it is a fundamental methodological principle of epidemiological analysis that you should not control for factors which form part of the causal chain – in this case explaining how inequality causes a particular problem. For example, if we think – as we do – that societies with greater income inequality have worse health because poorer social relations increase chronic stress, then we would need to be cautious about how to analyse that particular causal sequence. Simply including measures of trust and social cohesion in a statistical model could remove the association between income inequality and health, even though it is likely that inequality actually leads to poorer health because it is socially divisive.”
- “Third, including factors that are unrelated to inequality, or to any particular problem, would simply create unnecessary ‘noise’.
- They note some studies have tried to account for other variables.
- Reiterating – “relationship between inequality and various ... problems are not reducible to the direct effects of people’s material standard of living”. Fair, and I don’t think anyone would disagree per se – income is not the only cause of these things, and even if you don’t believe inequality “did it” it is likely that causal variables that are positive related to the problem will have a positive relationship with inequality!
- Introduction of UK, Aussie, NZ, and Canada increases fit on mental illness link – not they are all pretty close together.
- More data for “social mobility”, negative relationship weaker but less due to outlier.
- “Reducing inequality in OECD countries would prevent upwards of 1.5 million deaths per year” – reducing it by how much, and how. FFS.
- Social relationships matter for health. No shiz.
- “Economists sometimes suggest that the market is like a democratic voting system ... If this is true, someone with twenty times the income of another effectively gets twenty times as

many votes". [Link to myself](#) – also note that not thinking about the “web of prices” and what that income genuinely means in terms of goods and services is being confused here. Twenty times the income doesn’t mean twenty times the claim on goods and services, as relative prices will shift as that ratio rises.

- Something about inequality causing financial crisis – I will leave this to the side, not relevant to thesis.