Do Three Points make a trend?

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Newspaper articles have to have short, snappy titles. Like this Guardian one:

“Social mobility on the rise at last, says report”

Where as the following is a bit too long:

“Social mobility possibly on the rise at last, suggests a graph on page 36 of a report which included only three data points and measured something that may not be strictly comparable”

Well, it is certainly a bit more of a mouthfull.

Here is the graph:

Pretty isn’t it?
It’s useful too. But it represents just a fraction of a tenth of a percentage of the information in the government report that the headline was based on. The headline was based on this fraction because this was one of the very few parts of the entire report that could be drawn upon to suggest that there had been an improvement in social mobility during the first years of this current century. It is argued that this is because those children who were born in 1990 studied for their GCSEs in a country that had been changed by a Labour government. The argument made by government ministers and reflected in that *Guardian* headline was that that graph, in particular, demonstrated success.

Here is the graph’s title:

“The importance of family background to GCSE attainment appears to have declined for children that recently sat them*  
Relationship between family income and GCSE attainment, line shows standard errors (1)”

The key thing it says is that because those little vertical lines through the blue dots don’t overlap on the Y axis – the blue dot to the far right really is a little lower than the blue dot in the middle.

It is what they like to call “statistically significantly” lower. It is not just by chance that it is there – it is: time to celebrate. Social mobility – if you believe this graph and ignore most other key evidence, including the evidence in that same report – has increased.

And here are the claims made as a result of the drawing of that graph. The claims that appear on the same page of that report – released to the public later that day (Monday 3rd of November 2008):

“- Data are available on the GCSE attainment of a group of children born in 1990/91 who took their exams in 2006

- These suggest a statistically significant decline in the importance of family background on educational attainment compared to children born in 1970 (2)

- These findings, therefore, suggest that family background will have less of an impact on the income of these children when they reach adulthood, than those born in 1970 they are likely to experience higher social mobility (3)”

And here is the reference on that famous “page 36” that explains what those little suffixes 1, 2 and 3 refer to.

“This study also includes data on children born in the 1980s, but the samples are too small to reveal any statistically significant changes in the relationship between family background and attainment (1), (2), (3) Gregg and Macmillan (2008) Intergenerational Mobility and Education in the Next Generation, mimeo”
This note does make you wonder whether the little dot for the 1980s might have been a bit higher than the little dot for 1990, albeit with a long vertical line through it, but that is by the by.

What matters most is that these three little dots do not imply any increase in social mobility because they are measuring three very different things.

The dot for 1958 measures the O level achievements of children around the year 1974. These children’s futures were not decided by those achievements, but largely by how they did in an examination most took around 1969: the eleven plus. It was a different world. Family background had a little less effect because what determined your O level results was largely whether you got into a grammar school to be able to take O levels.

The dot for 1970 measured the O level or CSE achievements of children born in that year in exams taken around 1986. The large majority of children went to comprehensive schools then, and stayed on to 16. Very large numbers took these exams, in comparison to those born twelve years earlier, and the exams mattered. The key date for determining future life chances had moved on to how you did in these exams and studied (or not) at ages 15 and 16. A CSE grade 1 was said to be equivalent to an O level grade C, and getting 5 C’s or above was very good, and quite unusual in a normal school. Get that and you could be a bank clerk rather than a labourer. It mattered. The poorest of children still did not take these exams.

The dot of 1990 measured the GCSE achievements of children born in that year in exams undertaken around the year 2006. By 2006 GCSE’s were not longer the life chances determining examination that O levels and CSE’s had been. Children on average did far better in them. The grammar school in-a-school apartheid of those old examinations had been partly removed, although huge numbers of children are entered for GCSE’s where the maximum grade available is still a C. But life trajectory came to be determined later, at A level and equivalent stage, retaking, and in whether you were one of the one third of 18 or 19 year old to get to university by 2008. The battle had moved on from getting into grammars at age 11 to getting to university by 19; age 16 was no longer where it most mattered.

The various GCSE gaps can only narrow. That is because affluent children now routinely receive more GCSEs of high grades than is good for any children. When the vast majority of the children of social class one get seven good grades or more, they cannot do much better without it becoming silly. From that point on any improvement below is seen as a narrowing of the gap. That little blue dot should carry on bouncing down and down. Hopefully though we won’t have to see it again, just on its own, as we will have learnt that GCSE gaps are not where the battle for social mobility is being fought any more. That battle is now over who gets apprenticeships; are they any good; who gets into university; and increasingly what university.

In fact it is reported in the Financial Times today that Paul Gregg, who is partly responsible for the data the graph is question comes from, says the GCSE results “are encouraging”. But he adds: “GCSEs are only the beginning of the story of life chances and earnings.
"If more and more people are getting good GCSEs – and they are – then GCSEs may be less important than they were as the key to future life chances. People may need A-levels, or a degree or even a masters to really get on. It is a little like literacy, which was a huge advantage 200 years ago but became less so as more and more people could read.” The clutch of policies Labour has introduced may indeed have a lasting impact on social mobility for children born after 2000, he says. But it will be years before the evidence is clear. And right now, he says, “it is a bit premature to claim a big success”. (Nicholas Timmins (2008) ‘Can do better in the social mobility class’, Financial Times, November 4th)

The three dots in the graph, the story of increasing social mobility relies on, are significantly different from each other. But that does not mean that a significant change has occurred in social mobility. In health, in wealth, in poverty, in university entry or the gaining of no qualifications, in the latest Institute for Fiscal studies reports even in income, we are continuing to polarise. For a few years at the start of the century income inequalities dipped slightly, which was picked up by a recent OECD report, but sadly they are now rising again. The overall reduction in social mobility is seen mostly clearly between areas of the country – in terms of life expectancy rates, debt levels, and university access rates.

Had the conservatives won the 1997, 2001 or 2005 elections I am convinced the situation would be worse now than it is. But it could be so much better. It is much better in most other affluent countries. But it will not get better if we delude ourselves by looking at just three dots on a graph.