When I saw the title of this issue’s ‘editor’s choice’ paper, ‘Has Scotland always been the “sick man” of Europe?’\(^1\), the first thing that came to my mind was the deep-fried Mars bar. Readers in other countries may be unaware of this rather bizarre aspect of Scottish culture, which consists of dumping Mars bars in hot oil and eating them as a snack. According to one survey held in 2004, a fifth of Scottish fish and chips shops sell them to customers, at the affordable price of around UK £0.60.\(^2\)

It is easy to imagine that dietary habits, and other aspects of lifestyle such as smoking and excessive alcohol consumption, explain part of the Scottish mortality disadvantage. Scotland has a lower life expectancy than other parts of the UK, and indeed than other Western European countries, and the higher prevalence of these behavioural risk factors for cardiovascular disease and other causes of premature mortality are likely to play at least some role.

The article by McCartney \textit{et al.}, however, takes us way beyond such proximal risk factors, and proposes that the ultimate explanation is that ‘Scotland (has) suffered disproportionately from the adoption of neoliberalism’. To put it simply, these authors argue that the higher prevalence of unhealthy habits in Scotland is due to higher deprivation and larger inequalities, and these in their turn are due to ‘a neoliberal “political attack” under the Conservative government, which was first elected in 1979’. This government pursued a program of radical liberalization of the economy, which affected Scotland disproportionally.\(^3\)

This is a far shot that deserves closer scrutiny. The evidence in the article is limited to a simple correlation diagram, which shows that European countries with a larger increase in the ‘Index of Economic Freedom’ (a measure of neoliberalism) have experienced a smaller increase in life expectancy during the period 1980–2006. This rather weak association is, however, almost completely determined by the observations for Central and Eastern Europe.\(^1\) For these countries, there is some evidence that a rapid pace of economic liberalization had a detrimental impact on life expectancy in the 1990s.\(^1\)

Most of the evidence that a similar explanation may apply to the Scottish mortality disadvantage can be found in a more extensive and highly interesting report underlying this article. The report systematically evaluates the 17 (!) hypotheses that have been suggested to explain the Scottish mortality disadvantage, using Bradford and Hill’s famous criteria for causality. It ticks each hypothesis against the nine checkboxes of these criteria, and concludes that the ‘political attack’ hypothesis fulfils all of them, and fulfills more of them than any of the competing hypotheses including those on lifestyle factors and deprivation.\(^4\)

I wonder whether this is true. For example, have the authors given sufficient weight to the criterion of ‘plausibility’ in their evaluation of competing hypotheses? For all of the hypotheses, there is some evidence about the mechanisms, biological or otherwise, underlying the relationship between the putative explanatory factor and life expectancy. But is this evidence not much stronger for lifestyle factors and deprivation than for neoliberal economic and social policies? Evidence of the latter’s impact on mortality or any other health outcomes is inevitably much more difficult to collect, and so far the supporting evidence base is much thinner than that for excessive alcohol consumption or socio-economic inequalities.

That should, however, not discourage readers to seriously consider the possibility that political decisions, past and present, are playing a role in the explanation of variations in health between Scotland and the rest of the UK, and between countries generally. There is a growing body of literature that supports this idea,\(^5\) but most of the research suffers from important weaknesses such as a failure to adequately take into account time-relations and confounding factors. An adequate empirical test of the ‘political attack’ hypothesis of McCartney \textit{et al.} should be based on national time-series data for ‘neoliberal’ economic reforms, possible mediators, health outcomes and confounding factors, probably using fixed effects models to account for any unobserved confounders.\(^3\)

Hopefully, this interesting article will stimulate such further research. Even without that, however, it is a commendable effort to move beyond deep-fried Mars bars and other anecdotal hypotheses, and to tackle a very important question at the heart of European public health: the explanation of between-country differences in population health.

\textbf{References}