

Adam Smith Institute – Twisting Truths about HS2

As Think Tank reports on HS2 go, this is an odd one - it's detailed, and carefully researched, and where it gives a fact or figure it's probably accurate. The troubles are:

- The conclusions do not follow from the facts;
- Facts are left to stand in isolation, whereas if linked they would point to different conclusions;
- Facts are presented so as to be misinterpreted – to be “twisted by knaves”, without taking responsibility for it.

In fact, although presented in the name of Nigel Hawkins, either there are two authors at work who didn't talk to each other very much, or Nigel's careful work has been heavily edited by someone with an agenda. Certainly the covering press release does not live up to Nigel's standards, whilst dramatic quotations in the Daily Telegraph can't actually be traced back to the analysis at all. Nigel may have to remember his Kipling!

Let's have a look.

We can start with the alleged headline cost of HS2 of £50 billion. Read carefully, and you will find that this is an estimate not just for Phase 1 plus Phase 2, but for a complete network including Scotland. As a guess it's probably not bad for that, but of course this headline figure has been seized on, as Christian Wolmar has already done, by commentators too lazy to read it properly, as indicating a risk of cost overruns instead of being a valid guesstimate for the cost of a project that goes beyond anything yet been proposed or developed.

But when it comes to the issue of costs and overruns, the writer does not seem to have read what he has written. Whilst running the risk of HS2 cost overruns up the flagpole, in various references to HS1 the writer recognises that it was delivered on time and to budget. Elsewhere, he recognises that the “conventional” upgrade of the West Coast Main Line at one time headed for a cost of £13 billion before being delivered (largely through de-scoping) for around £9 billion, albeit an outturn which remained way over the original cost estimates. So the points for validity of cost estimates actually seem to be in favour of new construction, not “conventional upgrades” especially as Crossrail seems to be doing OK, and we will be going into the tunnelling work for HS2 with the experience of Crossrail still fresh.

That's another place where the author seems to have written one piece with his left hand and another with his right. In one place, he picks up that the cost per mile of HS2 is higher than for continental lines as another bit of bait for the lazy commentators; in another he quite correctly points out that in less-built up countries such as France and Spain the cost of mitigation is lower, there is less tunnelling, and their city terminals have spare capacity whereas ours don't and must therefore be expanded. So the shock-horror figure turns out to have a valid explanation, and my conclusion from this is that our high speed line must work hard for its living - once built it must do its job of handling 18 trains per hour, which documents just published by HS2 Ltd show conclusively that it can do.

Turning to the demand side of the business case, I am really going to give the writer some credit here, for one very specific reason, that he knows the difference between Eurostar and HS1. Just about everyone else who has tried to use HS1 as a stick to beat HS2 has either not known, or worse, deliberately concealed, the difference, precisely as the Adam Smith Institute's covering press release does. So here are the facts:

- Eurostar is the international train service originated by British Rail to connect London and Paris/Brussels by way of the Channel Tunnel, and which commenced operations in 1994;
- HS1 is the piece of infrastructure formerly known as the Channel Tunnel Rail Link, completed from the Tunnel to Ashford in 2004 and through to London St Pancras in 2007;

- London and Continental Railways is the group that bid for and won a concession to build the Channel Tunnel Rail Link, as part of which agreement with the UK Government they were gifted Eurostar so as to give an early income stream;
- Kent domestic High Speed services operated by the South Eastern franchise, started in 2009 and use HS1 for part of their journeys (the term “Javelin” by which the author refers to these trains in fact refers to the St Pancras – Stratford shuttle that will operate only for the period of the 2012 Olympics)
- HS1 Ltd is the company that has bought the concession for the operation of HS1 for 30 years – something else that Nigel gets right but the press release puts wrong. HS1 has not been sold, it has been leased, and will be returned to the government in 30 year’s time in a condition fit to be leased again.

But the author (or his alter ego) cannot resist bringing up the hoary old chestnut that “HS1” is carrying only a third of its forecast demand. No, it is not “HS1” but Eurostar that was doing that, as reported to the Treasury Select Committee in 2005. Now, look carefully at the facts above, and you will see that 2005 is two years before HS1 was completed, and so during that period from 1994 to 2005 Eurostar had still been operating over conventional lines at conventional speeds. So what does that “one third” figure have to do with HS1? Absolutely Sweet FA, or as we must now say, Sweet AS. Meanwhile, availability of HS1 has boosted Eurostar patronage, and the Kent domestic services are only “disappointing” on the North Kent to St Pancras route which uses HS1 for a very small part of its journey. Moral in both cases: speed works.

And here again the author has not joined up his facts. Later on he carefully identifies the fault for the optimistic Eurostar (I emphasise – Eurostar, not HS1) demand forecasts as being that of the promoters, London and Continental Railway, in their bid for the concession. There’s a funny thing about bidding for concessions, if you aren’t optimistic about your demand, you don’t win the competition. So for all the other bidders who get their figures right, we never find out that their forecasts were OK. But the key difference with HS2 is that HS2 Ltd who have produced the figures have no interest in operating HS2. They are not bidding for a concession, they have a remit to develop the scheme, and have used standard DfT methodologies to do so.

And these methodologies are conservative to a fault, as just about every rail scheme of recent years has shown, from local schemes such as Ebbw Vale – Cardiff and Stirling – Alloa, to the whole national network where the actual growth since privatisation has been way beyond anything forecast by standard models. The covering press release for this report notes that in 1980 no-one would have predicted the traffic levels of 2011 – damn right they wouldn’t, they’d have underestimated dramatically, as we are probably still doing today. The HS2 business case has been built on an assumption of less than 2% growth per annum, whereas the current actual growth is above 5%, and averages 4% over 10 years despite not just one but two financial crashes. And as the retirement age heads for 70 and the population heads for 70 million, arguing that this growth is somehow going to magically stop is just wishful thinking.

Now the author continues to depart from his previous standards. More old chestnuts emerge, such as video-conferencing to replace business travel. What proportion of business travel does anyone seriously expect to convert to video-conferences (as opposed to video-conferences being used for things that are not currently done at all)? Let’s say 10%. So that’s 2.5% of total traffic, and allowing for that, the dramatic (not) effect is that at current actual growth rates it will take 14 years to double demand instead of 13 years. Whoopy-blooming-doo. And with commuter overcrowding as it is, there must be suppressed demand so that if one person stays at home to work remotely, someone else simply steps up to fill their seat sorry standing space.

But it now gets worse. We’ve got another old one about people working on trains so time savings have no value. But as the latest research makes clear, time on trains is found to be between 10% and 20% as productive as time in a normal office. That fits common experience, I think. And even if we go for broke and assume that time on trains is 100% productive, the business case for HS2 improves, as moving people from non-productive modes such as car, or from non-productive conditions such as standing, means they become productive.

Jekyll and Hyde are really at work when Nigel points out that whilst HS2 will operate at a profit year by year in that fares income will exceed operating costs (which is why it can be leased for an up-front sum based on the present value of the future profits) there is a gap between that sum and the whole cost of the project including

the capital cost. This something the government accepts for the sake of economic benefits which are estimated conservatively to vastly outweigh that gap. But what does Nigel think is the case for a road scheme? There is no fares income, so there is no cash profit, so for roads it's ALL gap to be funded by the taxpayer.

Nigel then makes great play of the higher Cost : Benefit ratios expected of road schemes than rail schemes, but there are actually very good reasons for that, deriving from the fact that rail is able to operate a price mechanism not just to recover costs directly from users but to spread demand by peak pricing, and so ensure that the new infrastructure is used by the people who actually value it. Other odd details are that the benefits of road schemes are mainly small time savings of dubious value that become significant only when totalled for a large number of users, whilst in the absence of road pricing even these benefits promptly disappear in increased congestion as the number of users increases.

And so to "Other Options". Well here it's good and bad again. The good part is that the author has not regurgitated RP2, RP2+, or RP2 Turbo, or whatever the last name dreamt up by opposition groups to foist on everyone else so as to preserve their back yard happens to be. For the record:

- Promoters of RP2+ achieve sexy headline capacity figures by reducing First Class accommodation whilst ignoring people who use it in exchange for a very high fares yield, trying to claim benefits in respect of 11-car trains that are actually already being delivered, and packing the off-peak with capacity so as to generate sexy headline capacity and load factor figures that bear no relation to a railway that is run for the benefit of passengers and incur excessive operating costs for so doing;
- Even RP2+++ Super Turbo GTI, or whatever it's called this week, fails to deal with the increase in peak demand at the pessimistic background growth rate, let alone anything that approximates to reality;
- Even Andrea Leadsom MP has dropped this one, albeit in favour of the even more bonkers idea of a new-built suburban railway to Milton Keynes, which on examination turns out to have the most expensive bits of both HS2 and RP2 with a fraction of the benefits.

But – the author then goes on to contradict himself completely. He proposes building a new classic line, whilst identifying that the costs would be almost as high as a high-speed line whilst the benefits would be much lower.

Then comes the best bit – students are to travel between 22:00 and 05:00 so as not to add to peak crowding. Out of respect for Nigel Hawkins, I really have to assume that this part was written by someone else, probably someone with lots of consonants and punctuation marks in their name because they come from Planet Zog. Has he actually not realised that:

- Off-peak fares are already very cheap in the daytime for people who can choose the timing of their journeys, such as students;
- Students do not travel in the peaks now because peak fares are so high, so removing students from peaks is a non-issue;
- Between 22:00 and 05:00, it is rather handy to be able to i) maintain the railway, and ii) run freight trains – in fairness he does hint at this with "may" and "might", but if he'd ever even read even a Thomas the Tank Engine book he'd know that it's not "may" and "might" but "will" and "do".

All in all, if this had been submitted this to me as an assignment from a first-year student, I'd put it in the "Borderline Fail" category. Strong on just reporting facts, neatly presented, but evaluation and logic mostly noticeable by their absence, and a lot of assertions unrelated to the evidence. In fact I can sympathise with Nigel – a lot of hard work has gone into this only to be corrupted by a press release, which of course is the only thing the press ever actually read. I don't think Adam Smith would have approved.

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