December 2014

Dear Clive,

ECONOMIC CASE FOR HIGH SPEED 2

Thank you for your letter of 18 November posing a number of questions on the funding of large infrastructure projects, and HS2 specifically.

As Chair of the HS2 Growth Taskforce, I have a keen interest in ensuring this exceptional infrastructure project is used to deliver significant economic benefits up and down the country. The Taskforce recommended a range of ways to maximise these benefits – from accelerating regeneration around the new HS2 stations, to prioritising a dedicated skills strategy for the railway engineering sector. I was delighted the Government accepted my recommendations and I am pleased to see that good progress is being made. For example, the HS2 skills college, recently announced to be headquartered in Birmingham, will, by itself, be hugely beneficial. I would be happy to update the Committee on the Taskforce’s work and recent progress if that would be helpful.

In the meantime, I have set out answers to your questions below and am happy to provide further explanation in person on 9 December.

When assessing infrastructure projects much larger than the cost of any other scheme sponsored by a department, how does the Treasury assess the opportunity cost of the project?

Ensuring that taxpayers’ money is put to best possible use is a core Treasury objective. For this reason, the Treasury undertakes ‘zero-based’ capital reviews at spending rounds to determine how to spend the fixed capital envelope available. This process involves Departments simultaneously bidding for funding for specific projects, with the bids then being scrutinised by a cross-Whitehall panel of economists. This means decisions can be taken holistically, with a clear understanding of the opportunity cost of proceeding with particular schemes. This was the process followed at Spending Round 2013, which led to the decision to fund HS2, and has proved to be an effective way of comparing investment opportunities.
Does the Treasury compare the project against alternative projects that could achieve the same objectives?
Assessing possible alternative options is a key part of the decision making process for any investment Government makes. When considering providing funding for a major project, such as HS2, the Treasury asks Departments to produce a five-part business case. The first part – the Strategic case – will consider alternative options for achieving the same objectives. The Treasury then scrutinises this analysis to satisfy itself that a sufficiently broad range of alternatives has been considered and that the decision to rule them out is reasonable. In the case of HS2, DfT has done extensive work on the alternative ways of providing enhanced capacity and connectivity, including for example train lengthening, platform lengthening and timetable changes. Analysis shows none of these deliver comparable benefits to HS2 and would cause significant disruption to the rail network.

What is the effect of a scheme of the size of HS2 on the level of spending on other worthwhile transport projects?
While HS2 obviously represents a significant investment, it is important to note that this is not at the expense of investment in the wider transport network. HS2 is only one part of a portfolio in which investment is increasing, and other transport projects have also received substantial funding. For the period between 2015 and 2020, HS2 is receiving £16bn out of the £73bn transport investment. By way of illustration, between 2014 and 2019 Network Rail will spend over £35bn, allowing it to continue a substantial programme of expansion and renewal such as Crossrail and Thameslink, the electrification programme and the Northern Hub.

What impact has the increasing national debt and continuing efforts to balance public finances by 2019 had on the Treasury's assessment of the affordability and proposed timetable for HS2?
The Government has a clear plan to put the public finances on a sustainable footing and the action we have taken has already reduced the underlying structural deficit by more than half. Our overarching strategy involves prioritising capital investment within a limited spending envelope while carrying out fiscal consolidation. As such, we are protecting Public Sector Gross Investment in real terms from 2015-16 and then increasing it in line with GDP from 2018-19. This will allow us to deliver a pipeline of public investment in infrastructure worth over £100bn to 2020. The process put in place at Spending Round 2013, to take simultaneous decisions across the full range of Government investment areas, means we can be confident that HS2 is affordable within the broader capital envelope. We are also looking to bear down on HS2 costs to give ourselves the best possible chance of coming in under budget. The Chancellor and the Chief Secretary recently commissioned DfT to conduct a review into high speed rail in other countries, and identify concrete proposals for delivering significant savings to HS2. We have asked for conclusions in time for the next Spending Round.

What assessment did the Treasury make of the alternative proposals from across Government for rebalancing the economy for the £50bn funding allocated to build HS2 and purchase trains to run on the line?
Transport plays a key role in Government’s objective to build a stronger, more balanced economy, by bringing businesses within closer reach of critical labour markets and potential consumers. HS2 was assessed in a transport context, against two specific objectives: providing sufficient capacity to meet long term demand; and improving connectivity. The alternative options considered were therefore those that could have the potential to meet these objectives and included enhancements to the classic rail network (as mentioned above), road investment, airport expansion, plus the use of more graduated peak pricing of fares to smooth demand for rail travel. Analysis concluded that high speed rail investment was the best way to address the capacity and connectivity problems currently experienced on the existing rail network. Of course there are many other ways to address the broader challenge of rebalancing the economy, and indeed HS2 should be seen as just one part of Government’s work in this area. The Chancellor’s recent announcements on the Northern Powerhouse, covering science, innovation and local powers (as well as transport) demonstrate the Government’s commitment to boosting economic growth in the North.

The KPMG study undertaken for HS2 Ltd, HS2: The Regional Economic Impact, found that HS2 could generate Gross Value Added to the UK economy of £15bn per year. What assessment did the Treasury make of this quantification of the link between infrastructure and economic growth and were the arguments provided persuasive?

The majority of economic studies report that infrastructure has a significant positive effect on output, productivity, and growth rates, and is a key driver of jobs throughout the economy. As such, it is a key element of the Government’s long term economic plan. It is widely recognised that HS2, as a major infrastructure project, could have significant and wide-ranging effects on economic growth and the economic geography of the country, not all of which are assessed explicitly within the existing transport appraisal of the scheme. This was identified as a key evidence gap by HS2 Ltd’s independent advisory panel as well as the National Audit Office (NAO). The KPMG report represented a first attempt at filling this evidence gap and further analysis in this area will clearly be important going forward. DfT has also appointed a team of experts to undertake a comprehensive study to help Government improve its methodologies for assessing the full set of economic, social and environmental benefits of transport investment options.

What guidance is currently provided to departments on quantification of the Gross Value Added effect of large infrastructure projects? Are there any plans to provide additional guidance?

The Treasury’s Green Book provides guidance to Departments on how proposals should be appraised before funds are committed. This includes advice on valuing costs and benefits and covers, for example, how to distinguish between fixed and variable costs, and how to measure benefits with no obvious market value. The Treasury also provides supplementary guidance – Valuing infrastructure spend, which gives Departments further advice on assessing the costs and benefits of projects in economic infrastructure sectors, such as Transport and Energy. The Treasury is planning to refresh the supplementary guidance in early 2015. Departments are required to develop their appraisal methodologies in line with the Green Book; for example, DfT has developed their ‘WebTAG’ system which is used for all transport project appraisals.
What assessment has the Treasury undertaken of the Benefit Cost Ratio provided in the Economic Case for HS2 and in particular of the value assigned to the benefits which business passengers on trains derive from saving travel time?

As noted above, the Treasury provides guidance to departments on the valuation of costs and benefits of new proposals and requires that all business cases put forward are in line with this guidance. In relation to the ‘value of time’ assumptions used in the HS2 business case, DfT has recently undertaken further work in this area, looking at what passengers are willing to pay for faster journeys. This work has concluded that the values used in the HS2 business case reflect the current evidence available on ‘willingness-to-pay’ – a method of valuing benefits recognised in the Treasury’s Green Book. DfT and HS2 Ltd have also conducted a range of sensitivity tests on alternative values of time which suggest that the case is robust to a wide range of values of time. DfT is currently collecting fresh evidence on passengers’ willingness-to-pay to help narrow the range of uncertainty around the values. This work will also look to differentiate between business and non-business journeys.

Professor Stephen Glaister told the Committee on the basis of estimates of £50bn to build HS2 and purchase rolling stock, £10bn to operate the railway and operating revenue of £30bn, the total cost of HS2 to the taxpayer would be £30bn. What estimate has the Treasury made of the overall level of taxpayer subsidy for building and operating HS2?

The HS2 economic case, which is the part of the HS2 business case that assesses value for money, sets out the capital cost, operating cost and revenue generated by HS2. In line with standard practice, the figures in the economic case are discounted to reflect the fact that, generally, people prefer to receive goods and services now, rather than later. That analysis suggests that capital costs are £40.5bn, operating costs are £22.1bn, and revenue is £31.1bn. The net cost to Government is therefore £31.5bn. Separately the HS2 financial case provides a capital cost estimate for the project of £50.1bn. This cost is consistent with the cost in the economic case, but is higher because it has not been discounted. The financial case also shows that HS2, once operational, could generate a premium of around £300m a year to the taxpayer in addition to operating surplus across the GB rail network. This comprises an operating surplus for HS2 services of around £2.8bn and an additional subsidy for classic services of around £2.5bn (owing to classic customers moving over to HS2). I do not know the exact source of Professor Glaister’s analysis, but one possibility is that he may have drawn his figures from different sections of the HS2 business case. In any event, it would appear his estimate of the total level of taxpayer subsidy for building and operating HS2 (£30bn) is very similar to Government’s own estimate (£31.5bn).

What is the current level of taxpayer subsidy per household per year of operating, maintaining, renewing and enhancing the railway network in Great Britain? What estimate has the Treasury made of the level of subsidy once HS2 is operational and how much of that funding is accounted for in the business case for HS2?

The annual taxpayer subsidy to the GB rail network is currently around £5.3bn (based on 2013/14 figures). This would equate to roughly £200 per year for each of the 26.4 million households in the UK. As mentioned above, the HS2 Financial Case has
concluded that the introduction of HS2 would generate an additional premium to the taxpayer of around £300m a year. Therefore, if the level of taxpayer subsidy to the GB rail network were to stay the same as in 2013/14 beyond the effects of HS2, the total annual taxpayer subsidy to the GB rail network would be around £5bn (£5.3bn minus the £300m HS2 net premium). This would equate to around £190 per household per year. These figures are, of course, only indicative. Given that HS2 will not be open for many years, the analysis of its effect on operating costs and revenues across GB rail is at a very early stage and subject to the inherent uncertainties in long-term forecasting. The figures also assume demand is capped in 2036-37. Were demand assumed to continue growing beyond 2036-37, the operating surplus across the GB rail network would be enhanced by around £50m-£100m on average each year after the cap is reached, thereby reducing the overall level of taxpayer subsidy.

I hope these answers will prove helpful to the committee. I am copying this letter to the Secretary of State for Transport.

Lord Deighton