

# Brexit effects of the new EU Deal: A critique of the Models and assumptions used in its evaluation

By Patrick Minford

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## Executive Summary

### *Introduction*

*The usual anti-Brexit groups, including the LSE's Centre for Economic Performance, the IFS with its Green Budget Citibank partner, and the King's College economists who run the ESRC's Britain in a Changing Europe programme, are already attacking Boris Johnson's EU Deal, saying it will bring no benefits from free trade agreements with non-EU trade partners, but that it will create damage from new barriers that will spring up on UK-EU trade. In these views they echo the Treasury's Cross-Whitehall studies of Brexit, published when Philip Hammond was Chancellor and Theresa May Prime Minister. These groups also attack possible future moves to deregulation, and possible restrictions on immigration.*

*The first point to note in reply is that none of these policies is written into the EU Deal. This merely commits us to negotiate some future trade relationships with the EU in future. Essentially these debates belong to a future dialogue, not the current one on the current EU Deal.*

### **Policy Assumptions about Brexit**

*However, these arguments about future policies under Brexit are being used to attack Brexit itself and effect strengthen the case for Remain or a Brexit in Name only deal keeping us in the EU customs union and Single Market. They can be rebutted on two levels. First, that of policy assumptions. Second, that of models being appealed to.*

*Take policy assumptions. Free trade agreements with non-EU countries have the capacity to sweep away high levels of EU protection, estimated generally at around 20% on food and manufacturing. When abolition on this scale is simulated in the GTAP model now being used by the Treasury it raises UK GDP by 4%. The mechanism by which it does so is to lower UK consumer prices and exert competitive pressure on home industries, forcing them to raise productivity.*

*Some critics admit this but then go on to argue that it will sweep away home industry and jobs, and so is unacceptable: in effect they argue for continued protection. But notice that the two criticisms cannot be right at the same time: if free trade produces trivial benefits, it cannot also sweep away home industries and if it sweeps away home industries, it cannot be producing trivial effects.*

*The truth is neither criticism is correct. Free trade does have big effects and by creating strong competition it does not destroy home industries, rather it strengthens their productivity; as jobs are reduced by this productivity surge in these sectors, jobs are created in other sectors favoured by the economy's restructuring. As always strong demand policies will support general job creation that will keep unemployment low as this supply-side policy goes to work.*

*Now turn to the criticism based on the supposed barriers to spring up on the UK-EU border if we leave the customs union and single market. These are a myth of the windiest sort. The EU's trade with non-EU countries of whom we will become one, actually thrives. In the past few decades its growth rate has been nearly double that of the EU's intra trade, as extensively documented by Michael Burrage in work published by Civitas. There are good reasons for this, in that this trade is protected by WTO rules that are embedded in EU law.*

*These rules outlaw discrimination in product standards and enforce 'seamless' customs procedures, under which 98% of goods are pre-cleared by computer declaration and not inspected physically in port. Exporters of course make sure their goods are in line with EU export standards, and so meet no delays or other barriers. They pay the mandated tariffs through separate payment procedures. For UK firms that currently sell into the EU their products are already in line with EU standards, as they have been for many years. They will now switch into a new regime whereby they cross a seamless border; these crossings are repeated events and once the first has been arranged, at some small one-off cost in switching computer and other systems, the others will be costless repetitions. At the Swiss-EU border a leading Swiss ex-customs expert has put these costs at 0.1% of trade value. Notice that under an EU free trade deal no tariffs would be payable. So, in short, this great supposed new UK-EU trade barrier melts on inspection to virtually nothing.*

*Essentially, this disposes of the two big critical arguments from policy assumptions. We can see that free trade with non-EU countries, contrary to criticism no 1, does indeed bring big gains and these will not cause job losses overall in the economy. We can also see that, contrary to criticism No 2, new border barriers between the UK and EU will under an EU-UK FTA be a big fat zero. When these revised assumptions are put into the models these critical groups use nicely exemplified by the GTAP model now being used by the Treasury, instead of giving large negative effects on the economy, they produce large positives.*

*When one turns from trade to regulation and immigration, again the assumptions of the critics are at variance with a reasonable interpretation of intended policy. UK policy's stated intention on regulation is to follow the advice of experts in the relevant sectors, such as cancer scientists over cancer regulation, and City experts over City regulation, to ensure regulation assists innovation and prosperity. It is hard to quarrel with such an approach; and there is much evidence that this has not been followed by the EU in setting the regulations we currently labour under.*

*Finally, on immigration the Johnson government's stated policy is to have a points-based system that prioritises skilled immigration and ends the taxpayer costs created by uncontrolled unskilled EU immigration. Again, it is hard to see what can be quarrelled with on this; yet, amazingly, the Treasury itself assumed among its negative assumptions that EU skilled immigration would be totally stopped.*

## **Modelling assumptions- implications for policy**

*This leaves the final questions about modelling. The critics do not in all cases use a full general equilibrium (CGE) model such as GTAP in assessing trade effects. Several such as LSE CEP use a mixture of a short cut CGE model of output and a host of microeconomic relationships, 'gravity equations', at the same time: this 'mix and match' approach does not ensure internal consistency in trade, output and factor markets, as for example GTAP does. This is why the Treasury, which originally followed this method, switched to using GTAP. The GTAP model can be described as a 'weak-form gravity' model, in that it assumes imperfect substitutability between and within all commodities; one of the key assumptions of gravity trade theory is this imperfect substitutability. Another key one, that GTAP does not have, is that trade itself raises productivity via mechanisms such as foreign direct investment that it encourages.*

*Hence the GTAP model itself is controversial; its very structure increases the influence of UK-EU trade relative to UK-non-EU trade. In Cardiff we have done research recently testing a smaller, more manageable CGE World Trade Model on its ability to match UK trade facts; one with gravity features and one without. We find that the one without ('classical') matches the facts well, the gravity one is statistically rejected.*

*The dominance of the classical model has implications for policy. It means that the key question is how quickly we conclude trade agreements with key wide-ranging trade partners like the US. For example, if we did a US FTA tomorrow that meant US products could be freely bought here, then we would at a stroke enjoy the equivalent gains of complete free trade, given that the US is the world's most efficient supplier of almost all food and manufactured products.*

*If we were to do that, any FTA with the EU would essentially be irrelevant since it would not affect UK prices or output, dominated now by world prices. If we then traded with the EU under WTO rules, with mutual tariffs being levied, the burden of these would entirely fall on EU traders, since the prices EU exports could get in the UK would be world prices, so any UK tariffs would have to be absorbed by EU exporters; as for the prices of UK exports to the EU they would be also set by world prices, their alternative market at home and abroad; so any EU tariffs on them would be absorbed by EU importers and still the UK exports would sell as EU prices are higher not just by these tariffs but also by the non-tariff barriers they levy on non-UK products. The implications of this calculation are that WTO status with tariffs costs the EU £13 billion a year in tariff revenue, which is also a gain to the UK Treasury. Clearly this is a material factor in the EU's keenness on a trade deal in the future.*

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The many assembled groups of anti-Brexit economists have warmed up their earlier analyses of different Brexit policy combinations to attack the latest EU Deal negotiated by Boris Johnson. One of their mantras is that the Treasury's earlier published report when Philip Hammond was Chancellor gave negative assessments of different forms of Brexit and that the current Chancellor and his team should reissue these assessments.

However just as no government can bind its successor, nor can any Chancellor bind his. Sajid Javid, the Chancellor, and Rishi Sunak, the Chief Secretary, have wisely remarked that the Treasury's assessments were of various scenarios, none of which exactly corresponds to the Brexit Boris Johnson may well negotiate, but has not yet.

No-one can stop these various groups- including LSE, the IFS Green Budget team, and the King's College economists behind 'The UK in a changing Europe' - from continuing to publish negative assessments of their supposed Boris Johnson Brexit Deal. Indeed, also the civil servants who wrote the November Cross-Whitehall report published by the Hammond Treasury would no doubt gladly reissue it if allowed to by their new Treasury Ministers. However, there are three separate issues that all these groups would need to face in doing so, all of which would undermine their credibility.

The first point is that the current EU Deal merely commits the UK and the EU to future negotiations on a Free Trade Agreement. What will be in this Agreement is as yet totally unknown. It will of course depend critically on which UK government will be doing the negotiation after -presumably at some point- an election. We know this will make a lot of difference since a Johnson government would go for a Canada+ agreement whereas Mr. Corbyn's Labour party is in favour of continued membership of the single market and the EU customs union and indeed would put this Deal to a referendum with the option of Remain.

However, even the content of a Canada+ Agreement is at this stage largely unknown. Indeed, even a vote in the current Parliament 'committing' the UK government to some future FTA negotiating stance is a waste of breath since the current Parliament cannot bind a future government. Hence the first point is that any assessment must make quite plain what its policy assumptions are about this as-yet- unknown future EU agreement.

This brings me to the second key point. Any assessment hangs critically from its policy assumptions. Get these wrong and the assessment is irrelevant. However, if you look carefully, as I have, at many anti-Brexit assessments, you find that invariably the assumptions have been cooked to give the negative result.

These assumptions revolve around two main issues. First what trade barriers would the UK dismantle by its proposed Free Trade Agreements with non-EU trading partners. Second what trade barriers would spring up between the UK and the EU under different sorts of Brexit. On this question it is most illuminating to examine the Treasury reports on the long-term effects of Brexit which were highly explicit and thorough in their policy assumptions. Other groups have adopted generally similar assumptions; my critique here of the Treasury's, on behalf of the Economists for Free Trade group which I chair, applies equally to these other groups' reports.

There have been two such reports from the Treasury cooperating across Whitehall. The first came out at the beginning of 2018 as Slides with explanatory notes which were given to the Treasury Committee chaired by Hilary Benn, after previously being leaked to the press; I will call this the Cross-Whitehall Benn Report. The second was a full report with a Technical Annex, published by the Treasury in November 2018; I will refer to this as the November Report.

In the next section I discuss the Benn Report, which allows me to give the broad outlines of my critique of the approach and in an Appendix I discuss the November Report, which being much more detailed requires a more complex treatment, though one raising all the same issues of principle. To facilitate reading, each treatment is self-contained, repeating the essential arguments in full.

## **The Policy Assumptions made by ourselves and the Cross-Whitehall Benn Report.; and their implications for UK welfare**

This study made assumptions about 'general free trade via FTAs' that are conservative in the extreme. It stated that gains from their general FTA assumption are only a 0.5-0.8% rise in UK GDP. From this it would seem that they assume either that EU trade barriers are rather small or that barriers are reduced by rather little. This is puzzling since current EU protection of food and manufactures including non-tariff barriers is authoritatively estimated at 20% (Minford et al, 2015, chapter 4; also, for non-tariff barriers Berden et al, 2009).

Our assumption of the likely Brexit reduction of protection is deliberately cautious at 10%; it can be thought of as assuming either that only half is abolished or that somehow the EU would itself have abolished half anyway. With this 10% assumption our Cardiff World Trade Model predicts a 4% rise in GDP (Minford et al, 2015, chapter 4). If this 10% is fed into the GTAP model, then UK GDP would rise by 2%, while if all 20% EU protection were abolished it would rise by 4%. Interestingly, a recent study of Australian trade liberalisation over the past thirty years using GTAP (CIE, 2017) finds that its GDP has been increased by 5.4%- a figure rather similar to the gains being discussed for the UK's Brexit liberalisation.

The other key assumption made by the Cross-Whitehall Benn report is that large costs arise at the EU border for UK-EU trade even if we negotiate 'free trade' with the EU. One element of this appears to be related to pure 'border costs'; such things as time to get paperwork agreed before ships are allowed to unload.

However, these assumptions have been bypassed by the progress of technology and WTO rules for customs procedures (WTO, 2018c; World Bank, 2016). Computerisation has more or less eliminated border costs among developed countries, since almost all cargoes are cleared before reaching port, with only some 2 per cent or so physically inspected and even this is taking only around a day typically. Prof. Dr. Michael Ambühl (ETH Zürich), who negotiated one of the Swiss-EU bilateral free trade deals, estimated that border costs were as low as 0.1% of the value of trade (Ambühl, 2018, slide 8).

Another assumption in the study appears to be that UK-EU non-tariff protection would spring up after Brexit. The idea seems to be that the EU and maybe the UK too would claim that exporters do not satisfy required product standards; thus, non-tariff barriers would sprout on the UK-EU border, regardless of any trade negotiations. However, current WTO rules (WTO, 2018 a and b) outlaw such behaviour as illegally discriminative, given that existing product standards are already exactly obeyed on both sides.

Thus, it is hard to understand the study's assumptions on EU-UK border costs post- Brexit. Nevertheless, on the basis of these assumptions, the main GTAP model calculates large losses in GDP, variously amounting to between 3 and 7%, depending on the 'closeness' of the eventual EU arrangements. On our calculations, these costs are simply not there in the event of a free trade (Canada-plus) agreement with the EU.

We also have an assessment (Economists for Free Trade, 2018a) of the ‘no deal’ case within the Cardiff World Trade Model. In this case again non-tariff barriers and customs hold-ups are illegal but tariffs do apply; in our assessment the tariff element damages the EU but not the UK essentially because given that FTAs have driven UK prices to world prices, tariffs in both directions must be absorbed by EU traders.

The Table below summarises how based on available GTAP simulations (Ciuriak et al, 2015 and 2017) we have reconstructed the assumptions made by the Benn report as well as their published impact on GDP according to the GTAP model; it sets them side by side with what the GTAP model would say based on the alternative assumptions we regard as reasonable for UK-EU trade barriers and an assumption for FTAs with the rest of the world that achieve the full abolition of EU protection of food and manufactures.

**Table 3: Trade Effects under Brexit Scenarios According To GTAP-type model used by Whitehall**  
Table: Trade Effects under Brexit Scenarios According to GTAP-type model used by Whitehall

	<b>A: Whitehall Assumptions</b>		<b>B: Variant Assumptions</b>	
<i>Trade Barriers expressed as % Tariff Equivalent; Effect on GDP shown as % of GDP in italics</i>				
	Canada+	WTO	Canada+	WTO
Tariffs	-	4.5	-	4.5
<i>Effect on GDP</i>	-	-1.0	-	-1.0
New Standards	16.2	20.3	-	-
<i>Effect on GDP</i>	-3.6	-4.5	-	-
New Customs	5.8	5.8	-	-
<i>Effect on GDP</i>	-1.3	-1.3	-	-
<b>Total Tariff Equivalent (%)</b>	<b>22.0</b>	<b>30.6</b>	<b>-</b>	<b>4.5</b>
<b>Total Effect on GDP (% of GDP)</b>	<b>-4.9</b>	<b>-6.8</b>	<b>-</b>	<b>-1.0</b>
<i>FTAs with rest of world</i>				
<i>Effect on GDP (% of GDP)</i>	.....+(0.3-)0.6....		..... +4.0*.....	
<hr/>				
<b>All Trade Effects on GDP</b>				
<i>(% of GDP)</i>	-4.3	-6.2	+4.0	+3.0
*assume all EU protection of food and manufactures (20% average on each) eliminated via FTAs				

The Cross-Whitehall Benn Report therefore reaches its conclusions that Brexit reduces UK GDP on the basis of untenable assumptions. When reasonable assumptions are substituted for the extent of the trade barriers eliminated against the rest of the world and for the trivial UK-EU border costs, this reduction is turned into a substantial increase on both the GTAP model, and on the Cardiff World Trade Model. What is more this is true even on the Gravity version of that Cardiff model.

The Treasury in its latest Report published in November has not materially changed its overall estimates of the costs to GDP of the different Brexit scenarios; my critique remains the same and is set out in detail in the Appendix to this paper.

## Our research and the Models of the economy that we use to evaluate Brexit

To recapitulate the main points about the effects of Brexit according to our research, there are long-run gains from four main sources (Minford, 2017):

1. Moving to free trade with non-EU countries that currently face high EU protection in goods trade
2. Substituting UK-based regulation for EU-based Single Market regulation
3. Ending the large subsidy that the 'four freedoms' forces the UK to give to EU unskilled immigrants
4. Ending our Budget contribution to the EU.

In total these four elements, according to research in Cardiff, create a rise in GDP in the long term over the next decade and a half of about 7%, which is equivalent to an average rise in the growth rate of around 0.5% per annum.

If we leave with No Deal, i.e. under WTO rules with piecemeal side-agreements, we gain on top of this about £650 billion in one-off present value terms from extra tariff revenues, not paying the Deal's £39 billion, and making Brexit policy changes two years earlier; the EU loses £500 billion from all this.

At the heart of our estimates lie models which assume a world of tough long run competition in which industries can only survive by matching the competitive norm. By contrast the consensus among trade theorists is that competing firms have significant monopoly power due to their unique brands; this theory is known as 'gravity' modelling, in which natural monopoly power arises simply from size and proximity to consumers.

On this view cutting into rival markets is hard, and this fact also protects their own market position. Along with this view goes an interventionist theory of regulation: that 'rights' can be awarded to 'stakeholders' at the expense of monopolist firms, with little damage to their competitive position. Along with it too goes the view that productivity growth occurs automatically as a result of growing trade, itself a product of proximity.

In our research we find a very different world: a world in which lagging firms can be largely destroyed, with examples like Nokia and Blackberry coming to mind. We see the role of supply chains as squeezing out uncompetitive intermediate producers who do not devote enough effort to raising productivity via innovation. In this world business regulation can easily damage competitiveness. This is particularly true of labour market regulation, for which we have good estimates of the damage based on UK experience (see chapter 2 of Minford et al, 2015).

In our Cardiff World Trade Model we embed these assumptions and test their predictions against the facts of UK trade. We also set up a rival 'gravity model' as set out above. We test these models by indirect inference against the UK facts (Minford and Xu, 2018). This test is based on simulating each model many times to generate a full range of counterfactual histories due to randomly chosen reruns of historical shocks; we then ask how probable the actual UK history would have been if the model were correct. What we find is that the gravity model is highly improbable, well below a 5% minimum threshold of rejection, whereas the Cardiff model is fairly probable, comfortably above this rejection level.

The implications of the Cardiff models for Brexit are radical. Brexit will usher in a world in which for the first time in our post-war history the UK market will be entirely dominated by world competition, finally admitted by abandoning EU protection of farming and manufacturing. UK firms and farms will have to be competitive with the best the world has to offer; this plainly will lower prices to the consumer and raise UK productivity. Notice that because UK service sectors have never had EU protection, not much changes for them in terms of necessary world competitiveness. To ensure this competitiveness UK regulations will have to be business-friendly; utterly gone will be the idea that there is some 'free lunch' of 'rights' to be exacted from the business community for the benefit of particular constituencies.

What then of the position of EU firms in these UK markets? It will have fundamentally changed. Instead of being able to sell food and manufactures to UK consumers at inflated prices, owing to the lack of world competition, they will have to sell here at world prices, some 20% lower if EU protection is entirely removed. Were they not to match these prices they would simply be pushed out of the UK market, to sell nothing at all.

It needs to be understood just how large a change this is for EU exporters to the UK. The UK constitutes about a quarter of the whole EU consumer market. If prices fall by a fifth, their margins on a quarter of their sales may well be entirely wiped out.

But matters do not end there. If there is no UK-EU Free trade agreement then both sides must levy tariffs on the other, to comply with WTO rules; otherwise they must abolish their tariffs on everyone. But the EU will not because it is protectionist; the UK will not, because it wants to use its tariffs as leverage in FTAs with other countries.

UK tariff revenues from EU exports are estimated at £13 billion a year. But notice that these cannot be passed on to UK consumers after Brexit and UK FTAs around the world. EU exporters must match those world prices in the UK market; so bang goes another £13 billion bite into their margins.

Can the EU recoup these losses by their tariffs on UK exporters? This revenue is estimated at £5 billion a year. But notice these UK exporters now can sell their output at world prices at home; they will sell abroad at the same prices- arbitrage will force that. Abroad now includes the EU. The EU tariffs will therefore be passed on to EU consumers. This will not damage their sales compared with pre-Brexit, because their prices will still be competitive; pre-Brexit they were equal to world prices plus EU protection (tariffs plus non-tariff barriers), post-Brexit equal to home/world prices plus tariffs (only as there cannot be non-tariff barriers with the UK, standards being identical).

## **UK trade negotiations with the EU and the rest of the world: a struggle by the EU to control UK policy**

This analysis based on our Cardiff models sheds light on why the EU has so bitterly opposed Brexit. When the UK leaves, not only will it stop contributing money to the EU budget and stop the inflow of unskilled workers from the EU but also it will greatly reduce the UK profits made by EU exporters due to more UK competition and new tariffs. Furthermore, the UK will introduce lighter regulation designed to improve UK competitiveness, so reducing the scope for EU regulations to place burdens on EU industry which must compete with the UK.

However, our discussion also shows that the UK gains from leaving straightforwardly under WTO rules and rapidly proceeding on FTAs with the rest of the world, starting with the US, our biggest single trading partner, with whom we have a mutual interest in abolishing our EU- inherited import barriers. All that the EU achieves by refusing to agree a simple FTA with the UK is not to stop Brexit but rather to force the mutual imposition of tariffs, which makes EU losses even bigger. If the EU were to intervene diplomatically to oppose US-UK FTA discussions, it would risk inflaming its existing trade disputes with the US.

The main political weapon the EU has wielded has been the Irish border, claiming that there must be a 'hard border' if Brexit goes ahead and that this would create renewed IRA terrorism. However, this claim is not just irresponsible but also incredible, as the EU itself has admitted it would not impose a hard border under Brexit, while the UK has said the same, and the current government has committed to using technology and off-border checks to avoid it.

Another EU tactic has been to raise concerns about administrative disruption in the short run. However, any such disruption is mutually damaging and would be highly unpopular in both the UK and the EU- and if it involves border hold-ups is positively illegal, as I have explained above. Plainly anyway short term disruption by definition is temporary while long term gains persist and so are the dominant consideration.

## **Conclusions**

In sum, the key element in any immediate Brexit strategy designed to obtain the gains available from it is to achieve Brexit and so sovereignty. The best way to achieve this is via a simple exit under WTO rules.

However, now that the EU has negotiated seriously with the UK to agree a new Deal with Boris Johnson's government, then to relief all round this implies that a UK-EU FTA will be negotiated next, after withdrawal. In the long run this has to happen anyway if EU losses from tariffs are to be avoided. Whereas the UK is indeed better off with No Deal, it is damaging to the EU, our neighbour. Better for neighbours to have good relations than to score off each other.

## APPENDIX: Supplementary analysis of November Cross-Whitehall Report

After discarding use of its widely criticised ‘gravity-like’ model used in the initial Project Fear Referendum forecasts, the Treasury has now adopted use of a Computable General Equilibrium (CGE) model (GTAP from Purdue University) that is similar in approach to the World Trade Model at Cardiff University.

In this note we ignore the migration assumptions made by the Treasury which create large extra costs supposedly; however, these costs are based on absurd assumptions about abruptly cutting off the flow of migrants, when it is generally agreed that skilled migrants will be flexibly treated and unskilled migrants will be allowed in temporarily and without access to state benefits.)

Based on the latest Treasury Report and its Technical Annex, the assumptions are flawed in three fundamental ways:

### 1. They assume de-minimis benefits for the UK economy from future free trade agreements with non-EU countries

- Only a 0.2 per cent boost to GDP is forecast vs an estimate for Australia on the same model of more than 5 per cent from its 30 years of trade liberalisation
- It gets this by assuming
  - Quite low estimates of EU Non-Tariff Barriers (based on econometric work) around 7% for goods (other estimates suggest 16%). For services, it assumes UK NTBs after leaving the EU would be 15% (our estimate is zero as the UK has a liberal regime for services trade)
  - Only half of the goods NTBs can be abolished, and only one third of the services NTBs, giving the resulting NTBs to fall as follows:

Table 3.A: Summary of estimates of changes to UK-Rest of World NTB compared to today's arrangements for all scenarios

Compared to today's arrangements (per cent change)	NTBs into the UK for ROW trade partners (per cent)	NTBs into ROW trade partners for the UK (per cent)
<b>Manufactured Goods</b>	-3.3	-2.3
<b>Agri-food</b>	-3.6	-3.8
<b>Services</b>	-2.6	-4.2
<b>Financial Services</b>	-5.0	-5.6
<b>Networks</b>	-3.8	-3.6

*Negative figures reflect a reduction in NTB costs compared to today's arrangement.*

- Adding these abolishable NTBs to the average tariffs on goods gives a total eliminable of 8% on goods (average tariffs 4%); and 5% on services (no tariffs here)

- Under GTAP if these were abolished via FTAs that achieved the same barrier reduction on our imports as unilateral free trade, the gain would be 1.6% of GDP
  - However, in practice HMT assumes only around half of these gains would be achieved by FTAs, because of limited coverage. This brings the gain down to 0.8% of GDP.
  - Then HMT assumes that only one quarter of this programme will occur as it is 'under development' - see paragraph 76
  - This reduces the gain to the headline 0.2% of GDP.

76. The Government's approach to agreements between the UK and prospective trade partners is currently being developed. In this illustrative and indicative approach, representing ambitious agreements including but not limited to FTAs, it is estimated that under the central ambition case, 25 per cent of the actionable goods and services barriers might be reduced. These are applied in all the modelled EU exit scenarios. As set out in section 2.3.3 of the analysis document, the analysis does not model any constraints that the Government's policy could impose on future UK-RoW agreements.

Source: HMT Tech Annex

## **2. High border costs are assumed for the processing of customs declarations, rules of origin certificates, and goods inspections.**

This reflects a lack of understanding of how modern computerised, pre-declared border procedures work.

- Typical actual costs of modern procedures are well below 1 per cent and the Swiss customs authority reports costs of 0.1 per cent
- Inspections are intelligence led and a rarity (typically only 1 to 3 percent of shipments). They often require only confirmation of computerised documentation and can take place away from the border.

These costs across goods and services give rise to a loss of 1.8% of GDP.

### 3. Imaginary high compliance costs are assumed for exporters/importers to meet hypothetical new non-tariff barriers springing up immediately after Brexit.

These NTBs (see next Table) include the border costs discussed in the previous paragraph.

Table 2.D: Summary of estimates of changes to UK-EU NTBs by sector compared to today's arrangements.

Compared to today's arrangements (per cent change)	Modelled no deal	Modelled average FTA	Modelled EEA-type <sup>48</sup>	Modelled White Paper	Modelled White Paper with 50 per cent NTB sensitivity <sup>49</sup>
All Goods <sup>50</sup>	+10 (+6 to +15)	+8 (+5 to +11)	+5 (+3 to +7)	+1 (0 to +1)	+4
All Services	+11 (+4 to +18)	+9 (+3 to +14)	+2 (+1 to +3)	+6 (+2 to +10)	+7

Central estimates and ranges in brackets.<sup>51</sup> Note: estimates are rounded to the nearest per cent. Owing to rounding, narrow ranges (less than one per cent) are not distinguishable in the table.

Source: Treasury Technical Annex

This is based on the mistaken belief that the EU will suddenly determine that UK exporters do not meet product standards - despite over 20 years of shared rules and standards.

Such behaviour would be illegal under WTO anti-discrimination rules that require importers from all countries to be treated the same – i.e., a UK importer cannot be required to meet a standard that is not required of, say a US importer or indeed an internal producer from the EU. In other words, they must be existing EU standards - which we meet.

It also fails to understand how trade actually works – i.e., each importer makes independent decisions as to set their product configurations and the attractiveness of export markets. Hence even as standards change in future, exporters will make sure, from their own commercial interest, that their goods continue to meet these standards, as occurs throughout the world with export trade.

In reply to our criticism of these estimates, the Treasury evades the point, simply saying the WTO rules may not be implemented.

63. Rather than model NTBs with the EU, an Economists for Free Trade study<sup>55</sup> assumes no additional NTBs. They argue that given the UK's current regulatory alignment with the EU, any attempt to impose trade barriers would be illegal under WTO rules. The OBR notes that 'this appears to be based on Economists for Free Trade's interpretation of the WTO's MFN requirements. But most trade experts interpret these rules as meaning that the EU would be forced to impose the same NTBs that the rest of the world currently faces, unless the UK and EU sign a trade deal to lessen them'.<sup>57</sup>

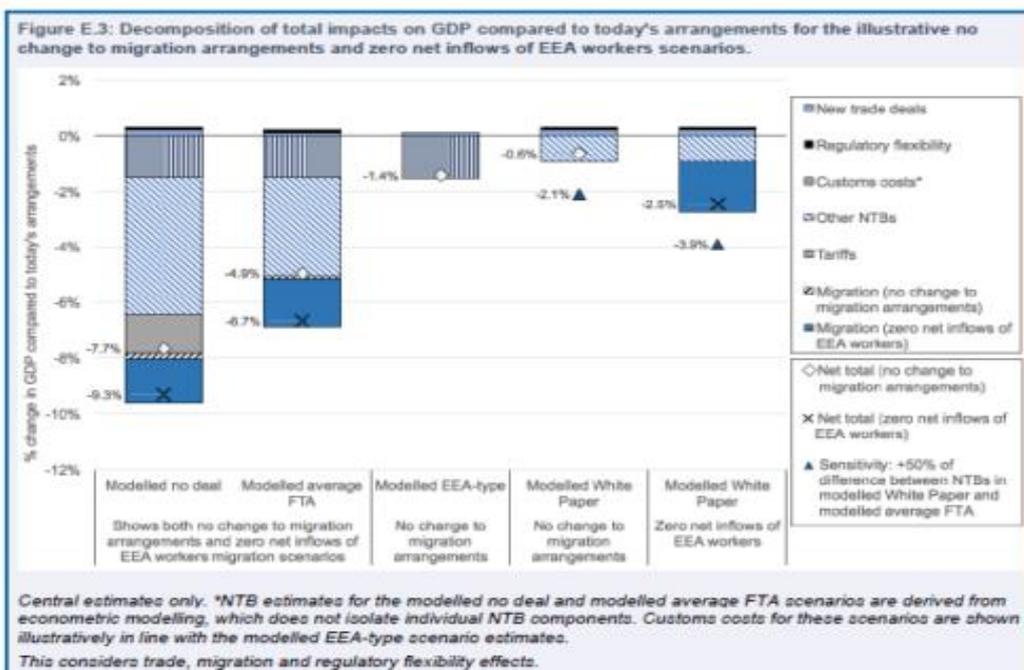
Source: HMT Tech Annex

Note that the EU imposes standards that the UK currently meets; these are ‘the same EU standards that the rest of the world currently faces.’ These standards of course act as NTBs to countries such as the US which cannot meet them.

The combined total effect of these assumptions is that – beginning with product standards and regulations identical to those of the EU – it would be as if the UK faced an EU tariff-equivalent cost on goods and services combined of around 14.5 per cent (of which only 4.5% is actual goods tariffs), if trading under WTO rules. This is about three quarters of the effective tariff actually faced by the US that, in fact, trades with the EU under WTO rules.

When these flawed assumptions are fed into the Treasury’s GTAP model, it forecasts a reduction to UK GDP of 7.7 per cent (see bar chart below). This is rather amazing considering that total EU trade accounts for only 12 per cent of total UK GDP and only about 40 per cent of this trade is exports that could be affected by such EU restrictions.

10 EU Exit: Long-term economic analysis



Source; Main Treasury Report

The table below compares the result of HMT model results with the estimated results that would be obtained from the same model if assumptions more reasonable than those used by the Treasury were fed into the model.

It should be noted that. due to the use of econometric estimates, the new EU trade barriers now assumed are lower than the judgements used in the earlier PowerPoint report, and indeed have been roughly halved. But the response of the UK part of model in the new report has been raised (more than doubled) to compensate and give a similar-sized hit to UK GDP from WTO and FTA scenarios. This alteration of the Treasury model is puzzling and suggests we need to have access to discover just why these changes have been made as well as their empirical justification.

It should be also noted that in separate work we have tested different model variations in our own Cardiff World Trade Model and found that the most accurate model is closest to the perfect competition Classical version.

Table: Trade effects under Brexit Scenarios according to a GTAP-type model used by Whitehall

Assumptions	A. Whitehall		B. Alternative	
	Canada +	WTO	Canada +	WTO
Tariffs	-	4.5	-	4.5
<i>Effect on GDP</i>	-	<i>-1.4</i>	-	<i>-1.4</i>
New Standards	16.2	5.5	-	-
<i>Effect on GDP</i>	<i>-3.6</i>	<i>-4.0</i>	-	-
New Customs Costs	5.8	4.5	-	-
<i>Effect on GDP</i>	<i>-1.3</i>	<i>-1.4</i>	-	-
<b>Total Tariff Equivalent (%)</b>	<b>22.0</b>	<b>14.5</b>	-	<b>4.5</b>
<b>Total effect on GDP (% of GDP)</b>	<b><i>-4.9</i></b>	<b><i>-6.8</i></b>	-	<b><i>-1.4</i></b>
FTAs with rest of world				
<i>Effect on GDP</i>	<i>0.2</i>		<i>+4.0*</i>	
<b>All trade effects on GDP</b>				
<i>Total change (% of GDP)</i>	<i>-4.7</i>	<i>-6.6</i>	<i>+4.0</i>	<i>+2.6</i>

\*Assumes all EU protection of food and manufactures (20% average on each) eliminated via FTAs

Trade barriers expressed as % Tariff equivalent; effect on GDP shown as % of GDP in italics

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