
Chair of the UK Statistics Authority, Sir Andrew Dilnot CBE

Bernard Jenkin MP
Chair
Public Administration and Constitutional Affairs Committee
House of Commons
London
SW1A 0AA

28 April 2016

Dear Bernard,

Thank you for your letter of 19 April in which you highlighted the government leaflet entitled "*Why the Government believes that voting to remain in the European Union is the best decision for the UK*", in particular page 4 which covers trade with the European Union (EU)¹. I have considered your letter, and sought the advice of colleagues, including our Director General for Regulation at the UK Statistics Authority, Ed Humpherson.

I have asked the Deputy National Statistician for Economic Statistics, Jonathan Athow, to produce a note attached to this letter which provides more information regarding the 'Rotterdam effect'.

It is important where data are used that sources are made available, and that official statistics are used with any important caveats and relevant limitations clearly explained. The sources for the "*Why the Government believes that voting to remain in the European Union is the best decision for the UK*" leaflet, available online, show that the 44 per cent figure² is drawn from the Office for National Statistics' (ONS) Pink Book 2015³ Table 9.3.

The term Rotterdam effect is used to describe the situation where goods initially exported to one country are subsequently re-exported to another country. Such an effect could be found at many ports. As you note, the Rotterdam effect is difficult to quantify precisely and any estimate must be based on a number of assumptions.

An ONS article published in 2015⁴, using data for 2013, estimated that at the top end, the Rotterdam effect could be up to 50 per cent of goods exported to the Netherlands, which would be around 2 percentage points of the UK's total exports of goods and services. Of course, there is considerable uncertainty about any such estimate.

¹<https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk>

² Footnote number 2 at <https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk>

³https://www.ons.gov.uk/file?uri=/economy/nationalaccounts/balanceofpayments/compendium/unitedkingdombalanceofpaymentsthepinkbook/2015-10-30/unitedkingdombalanceofpaymentsthepinkbook/pinkbook2015chapter9_tcm77-422053.xls

⁴<http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/december-2014/sty-trade-rotterdam-effect-.html>

As I explained when giving evidence to the Public Administration and Constitutional Affairs Select Committee on Tuesday, I have concluded that the size of the possible estimate of the Rotterdam effect, when compared to the overall level of UK exports to the world as a whole, suggests that the statement in the government leaflet⁵ is not significantly affected by it.

Nevertheless it does seem to me that a more prominent note in the Pink Book, drawing attention to this effect could be helpful for those drawing on the official statistics.

You also asked about industry sector data and ONS plans regarding this are set out in the appended note. As I mentioned on Tuesday I have also previously written regarding the topic of UK jobs that are connected to European Union membership⁶ and this correspondence is available on the Statistics Authority website.

Yours sincerely,

A handwritten signature in black ink that reads "Andrew Dilnot". The signature is written in a cursive, slightly slanted style.

Sir Andrew Dilnot CBE

⁵*"EU countries buy 44% of everything we sell abroad, from cars to insurance."*
<https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk>

⁶https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/letterfromsirandrewdilnottomatthewelliott02091_tcm97-44052.pdf

28 April 2016

Dear Sir Andrew,

Please find below a note on the economics statistics arising in the letter from Bernard Jenkin MP to yourself on the presentation of trade statistics in the Government's leaflet on EU membership, "*Why the government believes that voting to remain in the EU is the best decision for the UK*"¹.

The first issue raised is the share of UK exports that go to other countries in the EU, presented in the 'Stronger Economy' section². The leaflet says that "*EU countries buy 44% of everything we sell abroad, from cars to insurance*". This is based on ONS data for 2014 as published in the Pink Book 2015³, which is compiled using internationally agreed standards on how to account for imports and exports of goods and services. The 'Rotterdam effect' is the situation where goods initially exported to one country are subsequently re-exported to another country.

As Mr Jenkin notes in his letter, it is not possible to quantify the Rotterdam effect precisely, but as Mr Jenkin also notes, an article exploring this issue was published by the ONS in 2015⁴. The article used 2013 data to estimate the effect, and made an assumption that 50 per cent of all goods exports to the Netherlands were re-exported to non-EU countries. Using this assumption the Rotterdam effect would account for around 4 percentage points of the UK's exports of goods. These effects were calculated to illustrate the possible size of the Rotterdam effect and does not imply that a different data series should be produced or used.

The Rotterdam effect applies only to the export of goods. The 4 percentage points figure above applies to the share of the exports of goods only. Related to the total exports of goods and services to the EU, which was not included in the ONS article, but is the subject of the 44% figure in the Government leaflet, the Rotterdam effect is estimated at around 2 percentage points. For your information the estimates for 2013 to 2015 are presented in Table 1. All these estimates are speculative, and the Rotterdam effect could also affect the

¹ <https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk>

² <https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk#a-stronger-economy>

³ Calculated within table 9.3

https://www.ons.gov.uk/file?uri=/economy/nationalaccounts/balanceofpayments/compendium/unitedkingdombalanceofpaymentsthepinkbook/2015-10-30/unitedkingdombalanceofpaymentsthepinkbook/pinkbook2015chapter9_tcm77-422053.xls

⁴ <http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/rel/uktrade/uk-trade/december-2014/sty-trade-rotterdam-effect-.html>

UK's imports from the EU – that is to say, some such imports might actually have derived from outside the EU.

Table 1: UK exports to EU and Netherlands with estimates for Rotterdam effect 2013-2015⁵

	<i>£ million and per cent</i>		
	2013	2014	2015
Total exports of goods and services to EU countries	230951	230224	223347
Total exports of goods to the Netherlands	25958	22367	17304
Estimate of the Rotterdam effect*	12979	11184	8652
Total exports of goods and services to the whole world	521039	513428	511547
Exports of goods and services to EU countries as % of total	44.3	44.8	43.7
Estimate of Rotterdam effect as % of total exports of goods and services	2.5	2.2	1.7

*50% assumption for Rotterdam effect

The second issue Mr Jenkin raises is on the table of jobs and share of exports to the EU in particular sectors, also in the 'Stronger Economy' section⁶. It is not obvious these sectors are atypical in terms of the share of exports going to the EU. The weighted average⁷ of the share of exports to the EU from these sectors – noting that the six sectors referred to in this section represent 45 per cent of total UK exports to the EU, compared with the 44 per cent for the UK economy as a whole. The sectors presented therefore seem to be broadly in line with the experience of the economy as a whole.

The link between EU exports and jobs is explicitly made in the caption on the photograph on the page/section following the 'Stronger Economy', which says "Over 3 million UK jobs are linked to exports to the EU". The source of that statement is a HM Treasury publication "Number of regional jobs linked to EU exports"⁸ not an ONS publication.

Mr Jenkin asks for other information to be provided on the employment and exports of different industrial sectors. As the table in the document is produced by combining HMRC

⁵ Table compiled from

<https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/adhocs/005544tradewiththecountriesjantomar1999tooctodec2015> and total exports published in Quarterly National Accounts Table H1

<https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/ukquarterlynationalaccountsdatatables>

⁶ <https://www.gov.uk/government/publications/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk/why-the-government-believes-that-voting-to-remain-in-the-european-union-is-the-best-decision-for-the-uk#a-stronger-economy>

⁷ The average is calculated by weighting the export share of each sector by number of jobs.

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/509499/Number_of_regional_jobs_linked_to_EU_exports.pdf

and ONS data, producing equivalent data for other sectors is not particularly straightforward. As you are aware, the ONS has announced it will be publishing a 'UK Perspectives' statistical release on 25 and 26 May covering issues relevant to the EU referendum. We will explore what information could be provided in those documents to address the issues Mr Jenkin raises.

I hope this is helpful and would be happy to discuss this further.

A handwritten signature in black ink, appearing to read 'Jonathan Athow', with a stylized, cursive script.

Jonathan Athow

Deputy National Statistician for Economic Statistics | Office for National Statistics