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**Preliminary Investigations into Asymmetries in Bilateral Trade in Services Between the  
USA and the UK**

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# **Preliminary investigations into asymmetries in bilateral trade in services between the USA and the UK.**

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Introduction:

1. The Bureau of Economic Analysis (BEA) in the USA and the Office for National Statistics (ONS) in the UK recently began joint work on investigating the asymmetries between the bilateral trade in services estimates of the two countries. The BEA already carries out a similar exercise annually with Statistics Canada to reconcile the current account estimates of the USA and Canada. This short paper summarises the aims, processes, and issues arising from the work on the USA\UK asymmetries. It has been prepared jointly by staff from both organisations and concentrates on the way in which the work was conducted rather than any emerging findings about the nature or size of the asymmetries. Most of the work was conducted during a visit by analysts from the BEA to the ONS in London in November 2006.

Context:

2. The USA and the UK have similar statistical systems with regard to the collection of trade in services data. Neither country has an International Transaction Reporting System or any system of currency or credit controls. Both statistical systems are broadly survey-based, with sample surveys to enterprises being the main source for transportation and other private services in both countries. UK travel services are sourced from a frontier survey, while USA travel services are sourced from a combination of survey data covering expenditures and government administrative data covering the number of travellers. In both countries government services are largely sourced from government administrative data.
3. The USA is the UK's largest trading partner country with respect to both service credits and debits. In 2004 approximately 25% of the UK services credits and 18% of the UK's services debits were with the USA. Similarly, the UK is the USA's largest trading partner country with respect to both service credits and debits. In 2004 approximately 13% of both the USA's services credits and debits were with the UK.
4. The similarity of the collection systems and the size and significance of the countries as mutual trading partners mean that an exercise to investigate the bilateral asymmetries should be soundly-based and productive.
5. Aims of the work:
  - To identify, investigate and reduce the bilateral asymmetries between the UK's and the USA's official estimate for trade in services.
  - To improve the overall quality of the estimates for trade in services for each country.
  - To eventually produce and potentially publish a set of fully-reconciled estimates of trade in services between the USA and the UK. These would comprise a single data set that experts from both organisations recognised as being the best joint estimate for the total and the breakdown of trade in services between the USA and the UK

- It is currently envisioned that these joint estimates would only be used in this dataset. Thus far, the asymmetries are not well enough understood for either country to reflect the findings from this exercise directly in its official accounts.

Preparatory work:

6. A large amount of preparatory work took place prior to the BEA visit to the ONS. This was predominantly conducted via email, although some telephone conversations also took place. The first part of this involved agreeing on the scope and format of the data to be analysed. We agreed to analyse annual data for 2003 and 2004 and to use pounds sterling as the common currency. We also agreed to use the 11 top level components of the Extended Balance of Payments Services Classification (EBOPS) framework from the Manual on Statistics of International Trade in Services as the common basis for analysis and to use the definitions outlined in this manual and the 5<sup>th</sup> Edition of the IMF Balance of Payments manual. Also, to accommodate the perspectives of both countries, the term “eastbound” was used to refer to services exported from the United States to the United Kingdom (or, US credits and UK debits) and “westbound” referred to services exported from the United Kingdom to the United States (or, US debits and UK credits).
7. The second aspect of preparation was to exchange both published and unpublished methodological and data source documentation. In addition, the BEA had previously produced an internal paper on the bilateral trade in services asymmetries between the USA and the UK, which helped with this process. Next, BEA and ONS sought to construct and exchange their services trade estimates within the framework of the 11 top level EBOPS categories and their underlying components. The table below provides a comparison of the US and UK trade in services estimates for 2004 by EBOPS categories and the initial level of asymmetry. It is important to note that these data are not published elsewhere in this format.

Data for 2004 (millions of pounds):

BoP Code		Eastbound			Westbound		
		U.S. receipts	U.K. payments	Difference	U.S. payments	U.K. receipts	Difference
200	TOTAL SERVICES	22,590	14,752	7,838	18,456	24,731	-6,275
205	Transportation	3,332	2,589	743	4,085	3,697	388
236	Travel	5,228	3,567	1,661	3,314	2,651	663
245	Communications services	253	309	-56	140	437	-297
249	Construction services	62	1	61	19	13	6
253	Insurance services	882	112	770	1,805	2,121	-316
260	Financial services	2,339	956	1,383	825	4,379	-3,554
262	Computer and information services	1,061	569	492	73	1,362	-1,289
266	Royalties and license fees	2,548	2,827	-279	1,210	1,918	-708
268	Other business services	2,596	2,794	-198	1,307	7,143	-5,836
285	Serv. between related enterprises, n.i.e.	4,022	n.a.	n.a.	4,624	n.a.	n.a.
287	Personal, cultural and recreational services	1,305	409	896	27	555	-528
291	Government services, n.i.e.	275	619	-344	634	455	179

Next, the estimate for each EBOPS category was restated to a common basis. That is, adjustments were made so that the estimates for both countries are presented on a consistent basis. For example, to reach a common basis in eastbound travel services, the BEA reclassified the expenditures of UK residents temporarily employed in the United States from other business services to travel services. Finally, the preparatory

data exchange also involved resolving preliminary queries and providing documentation of adjustments made to reach the common basis.

8. The preparatory work allowed the visit to take place with both parties having a broad understanding of the others' methodology and data sources and with a detailed set of tables outlining the size of the asymmetries and their underlying data components, on a common basis. This allowed the work that took place during the visit to concentrate primarily on the asymmetries themselves.

#### The Visit:

9. Four economists from the BEA visited the ONS in London for three days during early November 2006. The visit was organised around a series of sessions working through the tables for each of the 11 EBOPS components with three analysts from the ONS. As the ONS was hosting the visit, various other ONS experts on different types of trade in services joined in these sessions as appropriate. For each of these components, the session covered the following issues:

- An outline of the detailed data sources and methodology used by each institution, including their strengths and weaknesses.
- Consideration of whether the data were fully comparable in terms of what was being measured.
- Investigation of the possible reasons for differences.
- Agreeing on changes to make to the data in the tables to resolve the asymmetries if possible.
- Agreeing to a list of actions to investigate further differences in scope and other possible reasons for the asymmetries and allow further changes to be made to the tables.
- A preliminary decision on what would be the best way to produce a fully reconciled estimate.

10. The main physical output from the visit was an agreed note of the visit which documented in brief, for each EBOPS category, the data sources and methodology, possible reasons for asymmetries, agreed changes to be made to the tables, a list of actions to investigate and where possible, preliminary decisions on how to reach a fully reconciled estimate.

#### Follow-up work:

11. After the note of the visit had been agreed, it was envisaged that ONS and BEA would prioritise and work through the documented actions and make the agreed changes as allowed by their own resources and priorities. These would be shared on an ongoing basis as work is completed and would also involve continual contact via email. This process has not yet been completed. A review of the progress made towards investigating all the agreed actions and making all the agreed changes is scheduled for a year after the visit.
12. At the point at which all the action points have been investigated and resulting changes made to the common basis data, the remaining differences, which can be assumed to be the result of inevitable coverage, sampling and methodological

differences, will be fully reconciled. This will be done by using either the BEA or the ONS estimate, if one is seen as likely to be of higher quality. If the two estimates are seen to be of equal quality and the asymmetry is relatively small, BEA and ONS will consider taking the mid-point of the two estimates as the reconciled estimate. If the two estimates are seen to be of equal quality and the asymmetry is relatively large, this will signal that additional investigation is required.

13. In general, sample surveys of enterprises are perceived to be more accurate for services credits than services debits. This is because exports of services tend to be concentrated in fewer companies, be of a larger size and relate to fewer products than imports of services, where large number of small companies can import a diverse range of products for low value amounts. However, much more research is needed to determine if this general statement accurately explains the asymmetries between the US and UK common basis estimates.

Issues:

14. A number of issues have arisen which have slowed down the work on USA\ UK trade in services asymmetries. It is worth considering these so that they can be addressed as part of the planning of the next stages of the work or early in the planning process for future similar work.
15. Firstly, an issue, particularly for the ONS, has been the availability of resources. Work on asymmetries does not form part of the core production work, except inasmuch as it can act as a form of quality assurance, and there are only limited resources for research and development work. ONS is in the process of a major update of systems and methodology for the whole of Balance of Payments and National Accounts, which has first call on these resources. The amount of resources available to devote to the asymmetries work has been limited and dependent on progress on the systems update project. To some extent this has been mitigated by careful planning and monitoring but there have been periods when the ONS has not been able to devote any resources to the asymmetries work.
16. The second issue is that of the confidentiality of enterprise data. One of the most productive ways in which asymmetries of some services categories can be investigated is to compare data at the enterprise level. This can result in better targeting of samples if enterprises that are not currently part of the sample are identified. It can also result in improvements in the quality of data for enterprises that are already sampled through challenging the data returns and by increasing the understanding of the global structure of the company and the nature of its transactions. However, most statistical offices, including the ONS and the BEA, have strict rules on the confidentiality of data at the enterprise level. The ONS analysts who have undertaken the asymmetries work are not responsible for the collection of most enterprise-level data, apart from transportation services, and did not have access to or feel confident in sharing enterprise-level data. The BEA analysts were also not able to share enterprise-level data, as most of the data are collected under legal authority that requires that individual responses be held confidential and published in a way that does not allow individual responses to be identified. During the visit, ONS analysts used their knowledge of the data to make general comments about enterprises that were likely to be main contributors to service trade between the two countries and

some progress was possible using this approach. Although comparing enterprise-level data would be an effective method for investigating the asymmetries of some services categories, the legal requirements for maintaining data confidentiality prevent the sharing of data.

17. The third issue related to the structure of the surveys used by the two organisations. For the period covered by the reconciliation, the BEA conducted separate surveys for trade in services by affiliated enterprises, which contain only very limited information on the type of service that is traded. The ONS trade in services survey sources do not identify whether the trade is with a foreign affiliated enterprise. This situation was picked up in the preparatory work when producing the tables. The BEA was able to make estimates of the breakdown of service trade with affiliates in the UK to include in the table used in the meetings during the visit. This issue shows the importance of thorough preparatory work.
18. It is important to note that beginning with 2006 data, BEA began collecting more information on affiliated transactions by type and geography. It is expected that the newly developed data will mitigate some, but not all, of the problems for trade in services by affiliated enterprises. Potentially, a large amount of re-examination of comparisons will be necessary when the new data are fully developed.

Conclusion:

19. The preparatory work ensured that the meetings during the visit were productive and enjoyable, with a lot of progress made on identifying possible reasons for asymmetries both through inconsistent classification and through differences in the methodology or the coverage of data sources. Since the visit ONS, in particular, have found it hard to devote resources to the work on asymmetries so progress has been limited and much work remains. However, the basis has been laid for successful investigation of the causes of the asymmetries and for the production of fully reconciled estimates of trade in services between the USA and the UK.
20. It should also be noted that the results for the 2003 and 2004 exercise may be quite different than for 2004 and 2005 and for 2005 and 2006. This is especially true in the early years of a comparison this complex. It could well require several reconciliation cycles before relationships “settle down” and complexities are fully (rather than only partially) understood. Such a complete understanding is necessary before the two countries can claim to have the “best” set of fully reconciled estimates.