



Transatlantic trade in services: investigating bilateral asymmetries in EU-US trade statistics

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Abstract

The European Union (EU) and the United States (US) are the biggest economic partners in international trade in services in the world, with total bilateral trade in 2015 exceeding EUR 400 billion according to the data reported by Eurostat. Persistent bilateral asymmetries in trade in services remain, however, a substantial issue and their reduction should lead to improved data quality and increased usefulness of data for users.

This document presents an overview of findings on asymmetries for international trade in services data for the EU-28 and its 28 Member States with the US, as collected by Eurostat and the US Bureau of Economic Analysis (BEA). Quantitative analysis of the data is accompanied by a discussion of identified differences in applied methodologies that might have contributed to the asymmetries. Data used in the analysis are compiled in the framework of the balance of payments and are based on the methodology in accordance with the IMF *Balance of Payments and International Investment Position Manual, 6th edition*. The asymmetries in services are relatively high compared with asymmetries for trade in goods, being particularly substantial for financial services and other business services. The analysis of the reasons for asymmetries should therefore primarily focus on these service items.

Keywords: international trade in services; balance of payments; trade asymmetries; international comparability.

1. Introduction

The United States (US) is the most prominent partner of the European Union (EU) in its international trade in services throughout the world. Close to 30% of the EU's trade in services with the rest of the world is with the US, while for the US the EU claims just over 30% of its international trade in services. In 2015, the EU's total trade in services (exports plus imports) with the US exceeded EUR 400 billion, rising to EUR 429.6 billion (from EUR 380.7 billion in 2014). On the other end, the US registered EUR 360.2 billion (from EUR 294.4 billion in 2014) in its trade in services with the EU, with mutually increasing trends in recent years. Given this important relationship, internationally comparable data on trade in services between the two counterparts appear of high relevance, especially when imposing that both statistics are compiled according to the same international methodological standards¹. In theory, bilateral gross transactions should balance each other, i.e. EU exports to the US equalling US imports from the EU, and EU imports from the US equalling US exports to the EU. In practice, however, there are differences, which hamper the interpretation of both statistical products and contribute significantly to overall global asymmetries in trade in services. The International Monetary Fund (IMF) and other international organisations have encouraged countries to address persistent bilateral asymmetries by engaging with major trading partners to understand differences in concepts, definitions, and compilation practices.² This paper is dedicated to measuring the extent of

¹ Balance of Payments and International Investment Position Manual, 6th edition (BPM6)

² See, for example, "Revisiting Global Asymmetries—Think Globally, Act Bilaterally," Prepared by the IMF Statistics Department for the 28th Meeting of the IMF Committee on Balance of Payments Statistics (2015); <https://www.imf.org/external/pubs/ft/bop/2015/pdf/15-08.pdf>.



asymmetries occurring in data on EU-US trade in services and to analysing available data on service components and partner country. We will see that part of these measured asymmetries relates to different concepts and classifications applied in the compilation of trade statistics, which challenge direct comparability of data, while others are based on information asymmetries that compilers often face with regard to import transactions and partner country attribution.

For the sake of comparability, all data and results are expressed in EUR. Thus, exchange rate effects may create a minor bias in the results. The comparison was conducted on unadjusted data and gross transactions. Credit and debit flows were compared separately in absolute differences; total asymmetries were measured as the sum of both. To avoid misinterpretations, the analysis applies the rest-of-the-world view from an EU perspective throughout, meaning that asymmetries are calculated as EU credits (exports) less US debits (imports) and EU debits (imports) less US credits (exports). EU data on international trade in services come from Eurostat's balance of payments database³, which is compiled on a quarterly basis and thus allows a high degree of timeliness. The corresponding US data come from the Bureau of Economic Analysis (BEA) publication database on US international trade in services, available with a country breakdown for all 28 EU Member States and the aggregate European Union (EU-28)⁴.

2. The impact of asymmetries on the bilateral services balance

Since 2012, official statistics of the EU and the US claim both being net exporters in services to each other. This illustrates the obscuring effects asymmetric statistics can have on the interpretation of data. While the EU reported net services exports to the US of EUR 13.8 billion in 2015, the US considered itself equally as net services exporter to the EU with a reported surplus of EUR 48.7 billion (Table 1). For 2015, the asymmetry is concentrated in EU exports-US imports, where the EU published exports of EUR 221.7 billion to the US while the US published imports of only EUR 155.7 billion from the EU. Asymmetries on the other side of the accounts were relatively small in comparison, with the EU reporting imports of EUR 207.9 billion from the US, and the US reporting exports of EUR 204.4 billion to the EU.

Table 1: EU-US trade in services, 2010-2015 (EUR million)

		2010	2011	2012	2013	2014	2015
EU-28	Balance	-9 009	-3 911	9 601	16 435	2 641	13 819
	Credit	136 631	149 485	172 647	180 954	191 673	221 689
	Debit	145 640	153 397	163 046	164 519	189 032	207 870
US	Balance	26 870	30 956	32 705	32 324	38 821	48 700
	Credit	135 202	143 120	154 947	153 689	166 629	204 432
	Debit	108 331	112 164	122 242	121 365	127 807	155 731

Source: Eurostat, BEA – Differences may apply due to applied exchange rates.

3. The extent of asymmetries in EU-US trade

In recent years, data on international trade in services between the EU and the US have shown increasing bilateral asymmetries. However, asymmetries dropped somewhat in 2015 due to a considerable decline in EU import-US export asymmetries. Generally, increasing asymmetries are supported by the nominal growth in bilateral trade in services over time. However, until 2014 EU export-US import asymmetries grew more than proportionally to the underlying transactions, which points to contributing factors to asymmetries other than market dynamics. This trend was surprisingly reversed only recently in 2015.

³ European Union and euro area balance of payments – quarterly data (BPM6), dataset bop_c6_q;
<http://ec.europa.eu/eurostat/data/database>

⁴ US International Services Table 2.3, US Trade in Services, by Country or Affiliation and by Type of Service;
<http://www.bea.gov/iTable/iTableHtml.cfm?reqid=62&step=10&isuri=1&6210=4&6200=257>



It appears noteworthy that reported EU services generally exceed reported US services, consequently showing nominal asymmetries with a positive sign (Table 2)⁵. This pattern indicates that either the EU overestimates its transactions with the US, or the US underestimates its transactions with the EU. This could also stem from differences in partner country attribution⁶.

As a consequence, bilateral asymmetries in total trade measured EUR 86.3 billion in 2014 and EUR 69.4 billion in 2015, while in 2010 the asymmetry was less than EUR 40 billion. This trend is attributable to increasing levels of asymmetries in EU exports-US imports and an outlier in EU imports-US exports in 2014. Generally, EU imports-US exports appear less asymmetric than EU exports-US imports. While EU export-US import asymmetries remained at elevated levels of EUR 63.9 billion in 2014 and EUR 66.0 billion in 2015, EU import-US export asymmetries have remained relatively stable at levels around EUR 10 billion since 2010 with an unexpected outlier in 2014 of EUR 22.4 billion, falling to only EUR 3.4 billion in 2015.

Table 2: Asymmetries and dynamics of EU-US trade in services, 2010-2015 (EUR million; percentage growth)

		2010	2011	2012	2013	2014	2015
	Total	38 737	47 598	58 505	70 418	86 270	69 396
Asymmetries	Credit	28299	37322	50406	59589	63866	65958
	Debit	10438	10277	8099	10830	22404	3438
Share of gross flows (EU-28)	Credit	20.7	25.0	29.2	32.9	33.3	29.8
	Debit	7.2	6.7	5.0	6.6	11.9	1.7
Growth in services (EU-28)	Credit	:	9.4	15.5	4.8	5.9	15.7
	Debit	:	5.3	6.3	0.9	14.9	10.0
Growth in asymmetries	Credit	:	31.9	35.1	18.2	7.2	3.3
	Debit	:	-1.5	-21.2	33.7	106.9	-84.7

Source: Eurostat, BEA – Differences may apply due to applied exchange rates. Total asymmetries are the sum of export and import asymmetries. Asymmetries as a percentage of gross flows and growth rates year-on-year relate to EU figures. Credit and debit flows are defined from the EU perspective.

These results prompt two questions: what is the driving force behind the steady increase in bilateral EU export-US import asymmetries beyond the observed market dynamics, and what provoked the outlier in bilateral EU import-US export asymmetries with the US in 2014, with otherwise usually low asymmetries between 5 and 7% of bilateral debit flows (EU-28) between 2010 and 2013 and below 2% in 2015? We will try to answer these questions by analysing component and country data.

4. EU-US bilateral asymmetries by services component

Eurostat disseminates data on the international trade in services of the EU for all standard components of the BPM6⁷. A residual component is added for services not allocated. BEA publishes only 9 service components, thus slightly deviating from the BPM6 standard presentation. Three components are either captured in part under different categories in the balance of payments (manufacturing services on physical inputs owned by others) or registered under other services components (construction; personal, cultural and recreational services)⁸. These restrictions complicate a direct comparison of bilateral component data for services, as the resulting asymmetries include differences in classification. However, values for these items vis-à-vis the US as estimated by Eurostat have not exceeded 2% of total services flows, so they should not significantly impact the overall picture.

More specifically, **manufacturing services on physical inputs owner by others** (goods for processing) are not classified separately as a services item by BEA. Rather, a change of ownership is

⁵ However, things become more complex when analysing service components.

⁶ Diverging views on the country breakdown for international services could involve third countries in the analysis, and reflect the difficulty, for either of compiler, to “look through” to the final recipient of the transaction.

⁷ BPM6, Appendix9: Standard Components and Selected other Items

⁸ BEA is researching potential estimation methods, with the goal of including these components in 2019.



imputed when goods enter or leave the United States. The value of these goods, including any value that is added during processing, is included in US goods exports and imports, irrespective of whether a change of ownership actually takes place. Consequently, this practice triggers asymmetries in both goods and services with the European partner statistics, where in line with the BPM6 recommendation, a change of ownership is not imputed on such operations.

Also, BEA does not report **construction or personal, cultural, and recreational services** as major services categories. Rather, the US definition of **other business services** is extended to include construction and selected elements of personal, cultural and recreational services. However, BEA does publish construction services as a subcomponent of other business services, and reports bilateral statistics for this subcomponent. Therefore, it is possible to remove construction from other business services in order to create the **other business services** aggregate that aligns more closely with international standards. Throughout the paper, this reclassification has been introduced, as feasible. Even with this reclassification, other business services are the largest contributor to the EU-US asymmetries for both export and import transactions, with EU data systematically exceeding the US mirror data (Table 3).

Further, US **financial services** exclude financial intermediation services indirectly measured (FISIM), and US **insurance and pension services** exclude pension services. These deviations from the BPM6 standard result from a lack of available source data⁹. Also, US **charges for the use of intellectual property n.i.e.** include transactions for the outright sale, rights to use, and rights to reproduce and distribute intellectual property because these transactions are not separately identifiable in BEA's source data. Together these deviations hamper straightforward comparisons with the corresponding EU statistics, and respectively bear the potential of exaggerating bilateral asymmetries for some components, as European compilers record these items according to the recommendations of BPM6¹⁰.

Interestingly, US-reported financial services exports consistently exceed EU-reported imports. Therefore, if the US were to introduce a measure of FISIM, it would further exacerbate this asymmetry. This suggests that either the EU Member States are underestimating financial services imports from the US, or the US is consistently overestimating explicit financial services fees from the EU. For EU exports-US imports the opposite is true; EU reported exports exceed US imports. This suggests that if the US were to introduce a measure of FISIM, the asymmetry would be reduced.

On the other hand, **travel and government goods and service n.i.e.** appear to be subject to a different set of measurement differences in both statistics. EU export and import of travel services and EU exports of government goods and services with the US are consequently lower than the US mirror data. This could indicate different practices in capturing data specific to these categories, such as the statistical treatment of military goods, personal expenses of diplomats, and business travel.

In general, offsetting effects in the bilateral asymmetries for services components reduce the overall asymmetry for total services, hiding the complex dynamics in the underlying components and calling into question our earlier conclusions of declining asymmetries in 2015. This can be illustrated by the lower EU import-US export asymmetries measured for 2015 (falling from EUR 22.4 billion in 2014 to EUR 3.4 billion in 2015). Indeed this decline was possible only due to escalating negative asymmetries in EU imports of travel, financial services and charges for the use of intellectual property n.i.e. (CIP). For instance, the EU reported financial services imports from the US of EUR 13.8 billion in 2015, down from EUR 16.7 billion in 2014. Meanwhile the US recorded financial services exports to the EU of EUR 28.0 billion in 2015, increasing from EUR 24.0 billion in 2014. As a result, the

⁹ BEA, US International Economic Accounts: Concepts and Methods, Chapter 10;

<http://www.bea.gov/international/pdf/concepts-methods/10%20Chapter%20ITA-Methods.pdf>

¹⁰ For instance, although FISIM data are not specifically available to us for the EU vis-à-vis the US, from extra-EU data we measure their share of total transactions between 2-3% of total extra-EU exports and 1% of total extra-EU imports of services.



measured negative asymmetry increased from EUR -7.3 billion in 2014 to EUR -14.2 billion in 2015 with the unpleasant side effect of limited interpretation of the data¹¹. The higher negative asymmetries in 2015 consequently reduced the otherwise positive asymmetries in other components (predominantly other business services), which leads to the misleading conclusion above that asymmetries in EU imports-US exports have decreased in that year. Indeed when looking at absolute asymmetries both export and import asymmetries increased in 2015.

On the other hand, EU credit flows, most substantially EU exports of other business services, financial services and telecommunications, computer, and information (TCI) services appear to be systematically higher than their US mirror data, which seem to be the driving forces behind the steady increase in bilateral export asymmetries with the US. This type of asymmetry is typical for services trade, as it is inherently easier to measure exports than it is to measure imports.¹² The asymmetries could also be the result of differences in partner country allocation, thus extending the asymmetries to third countries.

Table 3: Absolute asymmetries in EU-US trade in service components, 2014-2015 (EUR million)¹³

EU credits-US debits	2014	2015
Services, sum of components	83 810	89 762
Manufacturing services on physical inputs owned by others	:	:
Maintenance and repair services n.i.e.	163	606
Transport	3 784	65
Travel	5 026	9 087
Construction	389	735
Insurance and pension services	2 584	955
Financial services	14 294	15 783
Charges for the use of intellectual property n.i.e.	7 866	7 360
Telecommunications, computer, and information services	14 038	15 547
Other business services	30 266	34 156
Personal, cultural, and recreational services	:	:
Government goods and services n.i.e.	5 401	5 468
Services not allocated	:	:
EU debits-US credits	2014	2015
Services, sum of components	65 475	85 257
Manufacturing services on physical inputs owned by others	:	:
Maintenance and repair services n.i.e.	1 549	2 338
Transport	2 842	1 205
Travel	7 984	15 729
Construction	306	402
Insurance and pension services	1 672	1 623
Financial services	7 315	14 193
Charges for the use of intellectual property n.i.e.	7 608	11 703
Telecommunications, computer, and information services	3 411	3 980
Other business services	31 602	33 439
Personal, cultural, and recreational services	:	:
Government goods and services n.i.e.	1 186	645
Services not allocated	:	:

Source: Eurostat, BEA – Differences may occur due to applied exchange rates. Measures include a bias due to different classification practices.

¹¹ According to Eurostat, imports of financial services from the US have declined in 2015, while according to BEA, US exports of financial services to the EU have increased in the same year.

¹² It is generally considered easier to measure services exports because it is relatively easier to identify the domestic transactor; exporters of financial services, for example, are likely to be concentrated in the financial services industry, whereas financial services can be imported by any industry or even an individual. The IMF Committee on Balance of Payments Statistics regularly presents, in its Annual Reports, asymmetries at the world level, which show that global services exports are consistently higher than global services imports. See, for example, IMF Committee on Balance of Payments Statistics Annual Report 2016;

<https://www.imf.org/en/Publications/Balance-of-Payments-Statistics/Issues/2017/03/03/IMF-Committee-on-Balance-of-Payments-Statistics-Annual-Report-2016-44709>.

¹³ Absolute asymmetry means the sum of asymmetries in bilateral credit and debit flows without regard to sign.



5. The geographical breakdown of EU-US bilateral asymmetries

Eurostat and BEA disseminate the full geographical breakdown of bilateral trade in services of the 28 EU Member States with the United States. This enables the analysis of what bilateral country data contributed most to the measured asymmetries in the EU-US service trade. In general, the major contributors to bilateral EU-US asymmetries coincide with the main European trading partners with the US. This picture does not significantly change over the observation period.

According to Eurostat, in 2015 the US traded in services mostly with the United Kingdom (25.4% of total EU-US trade), Germany (17.3%), France (10.8%), Ireland (10.2%) and the Netherlands (9.9%). The major contributors to total absolute asymmetries were at the same time the UK (EUR 49.6 billion), Germany (EUR 19.1 billion), the Netherlands (EUR 18.5 billion) and France (EUR 14.0 billion).

6. Conclusions and Recommendations for Next Steps

EU-US bilateral asymmetries in services have shown an increasing trend in recent years, although at first glance with different patterns for services exports and imports. As we have shown, low asymmetry levels were the result of offsetting effects in the underlying components rather than real convergence of bilateral data. The bilateral asymmetries in EU exports-US imports clearly show an increasing trend, fuelled not only by underlying market dynamics but by other more systemic factors. Import transactions appear underestimated in both sets of statistics due to information asymmetries faced by the compilers or due to differences in partner country allocations applied (e.g. as illustrated for financial services). Asymmetries for both exports and imports stem particularly from other business services, which most prominently lead to EU export-US import asymmetries, and demands further bilateral investigations, in particular on different measurement practices. All these components bear a high potential for diverging compilation practices when applied in a local context (available data sources, estimation practices, etc.).

As a result, the statistical products of both Eurostat and BEA risk sending conflicting messages to their respective user communities (e.g. both claiming to be net exporters in total services and in some components). This suggests a need for more coordination among compilers in order to understand the dynamics of these asymmetries. The UK has a prominent share in the bilateral asymmetries in both exports and imports with the US, followed by Germany, the Netherlands, and France. At least among these four Member States and the US, a higher degree of bilateral coordination and possibly reconciliation appears instrumental. BEA plans to continue to engage with the statistical compilers of partner countries on this front.

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