United Nations ECE/CES/GE.20/2017/5



# **Economic and Social Council**

Distr.: General 10 April 2017

English only

# **Economic Commission for Europe**

Conference of European Statisticians

**Group of Experts on National Accounts** 

Sixteenth session

Geneva, 31 May – 2 June 2017 Item 2 of the provisional agenda

Country experience with measuring global production

Consistency between National Accounts and Balance of Payments statistics – the status of consistency in the nonfinancial accounts

Prepared by Eurostat<sup>1</sup>

#### Summary

In 2014 the process of methodological convergence in the compilation of European National Accounts and Balance of Payments statistics (BOP) was finally concluded. Hence, in applying both methodologies respectively, the European System of Accounts 2010 (ESA2010) and the Balance of Payments and International Investment Position Manual in its 6th edition (BPM6) suggest a high degree of comparability and consistency between BOP and the external account of the National Accounts. The essential question remains how the propagated methodological consistency is reflected in the statistical data. This paper presents the updated results of a data comparison between European Balance of Payments statistics and the rest of the world account of National Accounts conducted by Eurostat. It is based on available statistical data, surveys, quality reports, ad-hoc data confrontations and feedback from compilers, and concludes that full consistency and comparability of the two statistics still does not apply. Possible reasons for discrepancies are discussed and reflect recent findings of research, which is still ongoing. Uncoordinated compilation practices and the use of different data sources in the two statistic data sets appear as major cause for discrepancies, resulting from decentralised production processes in most of the EU Member States.

<sup>&</sup>lt;sup>1</sup> Prepared by Robert Obrzut.

#### I. Introduction

- 1. By end-2014 the process of convergence in the methodological standards for the compiling of European National Accounts and Balance of Payments statistics (BOP) was finally concluded. Hence, applying both methodologies respectively, the European System of Accounts 2010 (ESA2010) and the Balance of Payments and International Investment Position Manual in its 6<sup>th</sup> edition (BPM6) ensure a high degree of comparability and consistency between BOP and the external account of national accounts (rest of the world account)<sup>2</sup>. The essential question in this context remains how this methodological consistency is reflected in the statistical data, and if not, on what grounds discrepancies continue to exist.
- 2. In this paper we will present the latest results of a consistency analysis between European Balance of Payments statistics and the rest of the world (ROW) account of National Accounts, based on the statistical data available to Eurostat from the nonfinancial accounts of both statistical data sets<sup>3</sup>. It will give statistical evidence whether the two statistics can be considered to be consistent. The data comparison comprises the components of the nonfinancial accounts goods, services, primary and secondary income, and the capital accounts. We establish overall patterns in the EU-28 and originator countries, and finally conclude on the major causes for discrepancies, thus recommending reconciliation practices in the concerned Member States.

# II. Measuring BOP-ROW consistency in the EU-28

#### A. Time frame and methodology of Eurostat's regular data comparisons

3. Regular data comparisons of quarterly BOP statistics and the rest of the world (ROW) sector account are conducted by Eurostat since 2015 after the introduction of the BPM6 standard in European BOP statistics. Since then we are able to assess the evolution of consistency over time between the two statistics with a particular interest in the nonfinancial accounts. Although available time series are reported by some countries even back to 1999, reliable data comparisons across all EU-28 Member States appear currently feasible and meaningful from 2010 to 2015. Data are compared from quarterly statistics<sup>4</sup>, thus effectively reflecting back data revisions during the compilation year. Discrepancies are measured on gross transactions in the underlying nonfinancial accounts, as patterns could be different for export or import transactions in the accounts. This appears instrumental to avoid offsetting effects. For this purpose the respective transactions in BOP are compared with those of the Sector Accounts (QSA), and annualised in order to facilitate reading (Table 1).

<sup>&</sup>lt;sup>2</sup> BPM6 Appendix 7, ESA2010 Chapter 18

<sup>&</sup>lt;sup>3</sup> Eurostat does not provide of all necessary component data in order to sufficiently analyse the financial accounts in more detail. About the limitations to the analysis of the financial accounts see Obrzut (2016), p. 113f.

<sup>&</sup>lt;sup>4</sup> Quarterly BOP (QBOP) and the ROW sector of the Quarterly Sector Accounts (QSA)

Table 1
Reconciling the nonfinancial accounts of BOP and the ROW sector

BOP component	ROW item	Description				
Goods	P61	Exports of goods				
	P71	Imports of goods				
Services	P62	Exports of services				
	P72	Imports of services				
Primary income	D1	Compensation of employees				
	D2	Taxes on production and imports				
	D3	Subsidies				
	D4	Property income				
Secondary income	D5	Current taxes on income & wealth				
	D6	Social contributions and benefits				
***************************************	D7	Other current transfers				
	D8	Adjustment for the change in pension entitlements				
Capital account	D9	Capital transfers				
	NP	Acquisition less disposal of nonfinancial nonproduced assets				

Note: BOP and ROW items according to BPM6 and ESA2010

4. The prevailing data comparison refers to the latest data releases of January 2017. It compares the releases of QSA which are published about 3 weeks after QBOP in European statistics. Eurostat has conducted this comparison systematically since October 2015<sup>5</sup>. A bias for revision and vintage effects cannot be completely excluded however.

## B. Recent results on BOP-ROW consistency in a nutshell

5. Against the methodological consistency of the standards current measures confirm an overall exposure to discrepancies in some components of the European nonfinancial accounts (Table 2), assuming total absolute discrepancies as a sum of absolute discrepancies occurring in all 28 Member States on average around EUR 206 billion over the observed period (1.5% of average EU-28 GDP 2010-2015). In 2015 the extent of absolute discrepancies culminated to EUR 272 billion (1.9% of GDP) in the EU.

Table 2
Absolute BOP-ROW discrepancies in the nonfinancial accounts, sum of EU-28 Member States, by BOP item, 2010-2015 (EUR million; percentage of GDP)

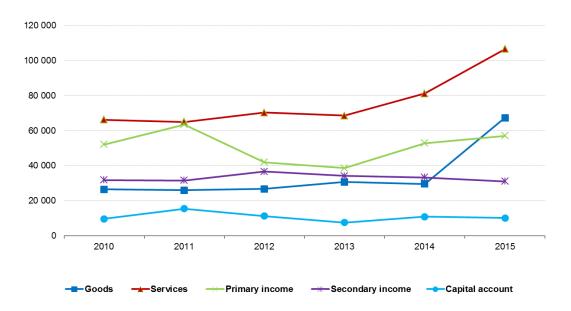
	2010	2011	2012	2013	2014	2015
Goods	26 478	26 029	26 781	30 799	29 688	67 390
Services	66 245	64 995	70 294	68 591	81 271	106 554
Primary income	52 149	63 479	42 033	38 678	52 831	57 112
Secondary income	31 896	31 651	36 710	34 232	33 324	31 085
Capital account	9 727	15 466	11 264	7 600	10 918	10 264
Total	186 495	201 620	187 082	179 900	208 031	272 404
% EU-28 GDP	1.5	1.5	1.4	1.3	1.5	1.9

Source: Eurostat

<sup>&</sup>lt;sup>5</sup> The latest report can be download from "Statistics Explained": http://ec.europa.eu/eurostat/statistics-explained/index.php/Consistency\_between\_national\_accounts\_and\_balance\_of\_payments\_statistics

**6.** The measured discrepancies affect in particular the **goods, services** and **primary income accounts**, where elevated discrepancy levels were observed over the past years with usually higher measures for 2015 in these components (Figure 1).

Figure 1 Absolute discrepancies by components of nonfinancial accounts as per January 2017, sum of EU-28 Member States, 2010–2015, (EUR million)



Source: Eurostat

7. Services and goods show to some extent a parallel evolution, as the underlying discrepancies also contain a systematic bias due to different classification practices of component items between goods and services (e.g. treatment of goods acquired by households abroad and/or travellers) in the National Accounts and BOP. However, in regard to total transaction volumes the exposure in services appears much more prominent than in goods. Differences in the primary income accounts relate most prominently to the component "property income" (D4), which due to its heterogeneous character and high incidence of estimations (e.g. on reinvested earnings, direct investment income) gives sufficient causes to divergent compilation practices among compilers.

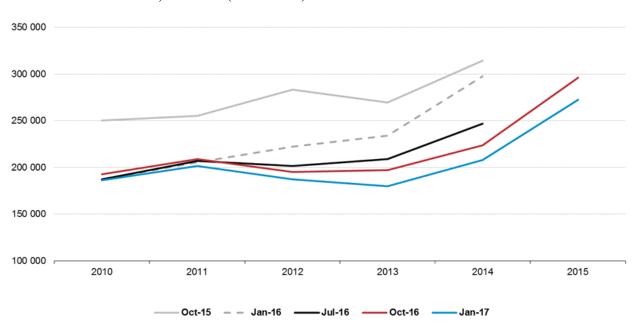
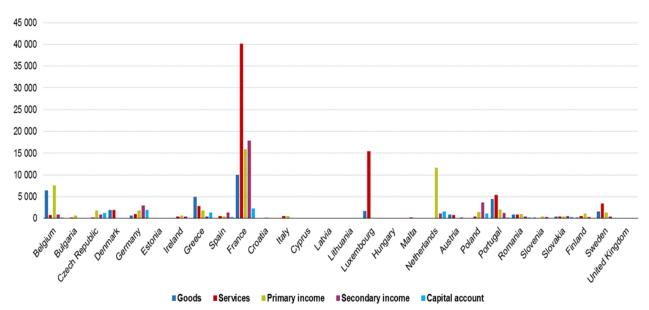


Figure 2
Absolute discrepancies in the European nonfinancial accounts over time, sum of EU-28
Member States, 2010–2015 (EUR million)

Source: Eurostat

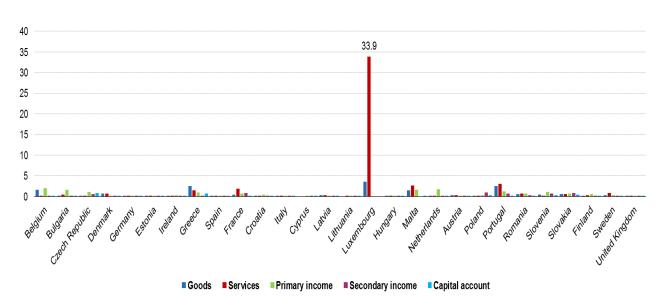
- 8. Despite the above evidence of persistent discrepancies, we may also conclude on the beneficial impact of data revisions during the past year (Figure 2). Since October 2015, when Eurostat first started to monitor consistency in the nonfinancial accounts after the convergence of the methodological standards, a considerable downward shift in discrepancy levels has been noticed, thus effectively reflecting most European compilers' ambitions to reconcile their statistics.
- 9. Overall total absolute discrepancies of the EU-28 fell from a multiannual average of EUR 274 billion in October 2015 to around EUR 206 billion in January 2017 for the observed period 2010-2015. This is an improvement of 25%, bringing down relative exposure to discrepancies from above 3% to below 2% of total EU-28 GDP. Between October 2015 and January 2016 most comprehensive revisions took place for the period 2010-2013, where compilers concentrated particularly on improving back data consistency. Later in 2016 compilers dedicated their attention to the more recent data, where considerable improvement was measured for 2012-2015. The recent data of January 2017 (blue line) confirm a continuation of this trend.
- 10. In view of the underlying country data of the EU-28, the geographical image of discrepancies in the EU-28 appears however highly dispersed. Major discrepancies originate from a group of 6 Member States only (Figure 3a).

Figure 3a Absolute discrepancies in the European nonfinancial accounts by EU-28 Member States, mean 2010–2015 (EUR million)



Source: Eurostat – Absolute discrepancies = BOP minus ROW items

Figure 3b Relative discrepancies in the European nonfinancial accounts by EU-28 Member States, mean 2010–2015 (percentage of GDP)



Source: Eurostat - Relative discrepancies in % of GDP (mean 2010-2015)

11. Depending on their exposure to the components of the nonfinancial accounts France, Luxembourg, Belgium, the Netherlands, Portugal and Greece show absolute discrepancies higher than EUR 10 billion in their multiannual means 2010-2015. These countries contribute currently to more than 76% of all discrepancies in the EU-28. 42% of mean

annual discrepancies during 2010–2015 alone are attributed to France, which is currently the main contributor to BOP-ROW discrepancies in Europe. On the other hand the statistics of the United Kingdom, Cyprus or Ireland appear fully consistent.

- 12. In regard to discrepancies in the components the profiles of the 6 mentioned countries differ significantly from each other: while France, Luxembourg and Portugal see high levels of discrepancies in services, the Netherlands and Belgium face most of their discrepancies in the primary income accounts. France, Belgium, Greece and Portugal also have elevated discrepancies in their goods account, with the first two contributing prominently to the outlier in 2015.
- 13. However, in relative terms to the countries' GDP, discrepancies appear significantly downsized, except for Luxembourg (Figure 3b). Luxembourg's discrepancies related to services amount to 34% of its GDP, and to goods 4% of GDP. All other countries measure lower relative discrepancies to their GDPs, thus indicating little statistical significance.
- The above situation is described in scientific literature as "Nash equilibrium". Nash equilibrium is a stable state of a system that involves several interacting participants in which no participant can gain by a change of strategy as long as all other participants keep their strategy unchanged<sup>6</sup>. In the above context this characterises a situation, where Member States with relatively insignificant discrepancies will not pursue any other strategies than keeping the status quo, while at the same time these discrepancies remain significant to overall EU-28 statistics. These Member States will therefore not prioritise a move towards higher consistency levels due to this lack of significance as it makes unilateral initiatives appear uneconomical, and accept the (second best) status quo as their dominant strategy. As a way forward cooperative strategies are suggested, moving participants towards an overall optimal situation (characterised ideally by full consistency). Such endeavours cannot be launched unilaterally, but require a neutral coordinating body with a view of the total picture. This emphasises the EU institutions' role as motor in order to pave the way towards more consistent statistics among Member States, where these Member States would otherwise consider exposure to discrepancies insignificant. Due to the high concentration around a few countries quality initiatives involving them could already create a high overall impact.
- 15. We would like to illustrate this situation by some EU Member States' exposure to discrepancies in cross-border services for the year 2015 the most exposed component to discrepancies in the EU-28 as shown earlier. The below mentioned 6 countries have a common pattern in their discrepancies for services the measured discrepancies appear negligible when related to country's GDP, although they contribute prominently to overall discrepancies of the EU-28 (assuming more than 60% of total EU discrepancies in services for 2015). Most dramatically France contributes to almost 50% of total discrepancies in services, but measures its discrepancies for services only by 2.4% of GDP. From a national point of view it could be argued that the consistency issue is statistically not significant, and appears somewhat exaggerated.

<sup>&</sup>lt;sup>6</sup> Princeton University, http://www.princeton.edu/main/tools/search/?q=Nash%20Equilibrium

Table 3
Selected EU Member States with high relative impact to discrepancies in services, 2015 (EUR million; percentage of GDP)

		Country share	Share		
	Discrepancy	to total EU	in % of		
	(EUR million)	discrepancies	countries GDP		
Belgium	1 031	1.0	0.3		
Denmark	2 107	2.0	0.8		
Greece	871	0.8	0.5		
France	52 370	49.1	2.4		
Portugal	6 894	6.5	3.8		
Sweden	2 341	2.2	0.5		

Source: Eurostat – Discrepancy = sum of absolute differences of credit and debit flows of reference country with their mirror transactions in the ROW account of the reference country

#### C. How does inconsistency impact statistical comparability?

- 16. How relevant the consistency issue however can be, is illustrated by its impact on the statistical comparability. Due to the occurrence of high discrepancies, opposite signs in the account balances of both statistics could be the consequence, thus posing a considerable challenge to the economic reading of the data. In Table 4 we show the balances<sup>7</sup> of the nonfinancial accounts in both statistics for 2015.
- The majority of data sets show consistent signs in the EU-28 positive balances indicate net exporting, negative balances net importing economies. However, in some Member States the signs of balances appear contradictory: as a prominent example France appears as net exporter in BOP services of EUR 8.8 billion, but equally a net importer of EUR 8.8 billion in QSA services (2014: BOP net exports of EUR 16.9 billion against QSA net imports of EUR 5.6 billion). Further, in its capital account it appears as BOP net exporter of EUR 2.1 billion, but minor QSA net importer of EUR 0.1 billion. Poland reports a negative balance in its BOP secondary income account of EUR 0.8 billion, but a positive balance in the corresponding QSA of EUR 3.1 billion in 2015. For Luxembourg the BOP balance of goods is negative (EUR -2.6 billion) and consequently labels the Luxembourg economy as net importer of goods. Its QSA for goods appears however positive with a surplus of EUR 1.7 billion, labelling the country as net exporting economy for goods. Belgium reported a net import in its BOP primary income account of EUR 0.9 billion and a slight net export in the corresponding QSA of EUR 0.1 billion. We must assume that these examples are either based on deviating understanding in reporting of sign conventions, or illustrate the most dramatic consequences of inconsistent time series, allowing for contradictory conclusions<sup>8</sup>. Under any circumstances conclusive reading and accuracy of the underlying time series is challenged with a potential reputational impact to the compiler.

<sup>&</sup>lt;sup>7</sup> BOP balance = credits minus debits; QSA balance = ROW payables minus ROW receivables.

<sup>&</sup>lt;sup>8</sup> The 5 incidences are currently under investigation by the respective Member States.

Table 4
Component balances in the BOP/QSA nonfinancial accounts, 2015
(EUR million)

	Goods		Services		Primary income		Secondary income		Capital account	
	ВОР	QSA	BOP	QSA	BOP	QSA	BOP	QSA	BOP	QSA
Belgium	2 579	1 112	6 770	5 739	- 869	149	-6 666	-6 330	113	114
Bulgaria	-2 623	-2 623	3 083	2 691	-1 930	- 908	1 642	1 797	1 422	1 122
Czech Republic	7 705	7 468	2 751	2 748	-8 940	-10 979	- 42	-1 293	3 877	5 189
Denmark	13 588	11 481	6 528	8 634	9 108	9 110	-4 343	-4 342	- 965	- 963
Germany	259 620	263 170	-31 229	-33 631	63 738	66 014	-39 549	-38 503	- 159	-1 778
Estonia	- 861	- 862	1 702	1 701	- 418	- 419	25	6	421	414
Ireland	110 568	110 568	-29 358	-29 358	-51 916	-51 928	-3 139	-3 129	-1 255	-1 255
Greece	-17 232	-16 010	16 933	16 262	1 026	659	- 521	- 804	1 988	3 631
Spain	-21 746	-21 745	47 973	48 091	- 661	- 780	-10 841	-11 286	7 009	7 007
France	-24 005	-21 197	8 803	-8 841	51 973	35 425	-41 121	-48 331	2 075	- 114
Croatia	-6 664	-6 663	7 899	7 889	- 279	142	1 266	1 215	277	323
Italy	52 262	52 264	-1 605	-1 735	-9 193	-9 116	-14 815	-14 812	2 637	2 638
Cyprus	-3 168	-3 168	3 226	3 226	- 61	- 65	- 510	- 514	49	49
Latvia	-2 042	-2 042	1 765	1 765	- 58	- 59	145	148	683	683
Lithuania	-1 986	-1 986	1 744	1 744	-1 552	-1 506	923	947	1 123	1 117
Luxembourg	-2 612	1 651	20 358	15 258	-15 942	:	880	:	- 595	:
Hungary	4 373	4 374	5 393	5 398	-5 026	-5 140	-1 199	-1 193	4 982	5 131
Malta	-1 854	-1 782	2 584	2 506	- 489	- 385	243	:	167	165
Netherlands	76 147	76 144	-3 271	-3 217	-2 376	-2 452	-11 885	-13 118	-33 966	-33 860
Austria	1 499	2 059	10 016	11 565	-1 851	-1 855	-3 384	-3 368	-1 679	-1 679
Poland	2 214	2 214	10 918	11 091	-14 937	-15 931	- 848	3 148	10 161	9 710
Portugal	-9 103	-7 708	12 402	9 018	-4 043	-4 281	1 500	2 470	2 235	1 981
Romania	-7 773	-7 772	6 791	6 933	-3 736	-3 043	2 790	2 094	3 897	4 895
Slovenia	1 498	1 498	2 019	2 020	- 982	- 885	- 537	- 566	371	386
Slovakia	2 115	1 806	95	102	- 927	-1 282	-1 115	- 511	2 790	1 653
Finland	1 865	1 071	-1 608	-2 199	1 194	1 777	-2 321	-2 583	160	162
Sweden	12 185	13 422	9 932	7 802	6 262	6 819	-7 429	-7 160	- 889	- 869
United Kingdom	-164 751	-164 750	123 745	123 746	-35 573	-35 574	-33 988	-33 986	-1 545	-1 546

Source: Eurostat

# III. Reasons for discrepancies – findings and ongoing work

- 18. Due to the potential impact on comparability, a clearer view on the causes for inconsistent statistics is deemed instrumental. Since the introduction of the BPM6 in European BOP statistics, Eurostat has launched two surveys among European compilers, which allowed them to give explanations for the measured discrepancies in both statistics. This feedback from the compilers helped to establish a few patterns about discrepancies:
  - The organisational setup of national compilation processes plays a prominent role in explaining the occurrence of discrepancies. Decentralised statistical compilation systems lead more likely to institutional coordination and thus consistency issues.
  - Different access to (micro) data sources or source statistics could generate
    discrepancies, in particular for items that can be measured from a heterogeneous
    spectrum of data sources. These data sources come to the compiler also at different
    frequencies in BOP and National Accounts statistics. Further, "contagion effects"
    arising from different (vintages of) source data, could import discrepancies to the

<sup>&</sup>lt;sup>9</sup> Results were published in a dedicated Working Paper, see Eurostat (2016), which were confirmed by the recent exercise in 2017.

final statistical product (e.g. financial data for the calculation of investment income)<sup>10</sup>.

- Items that are difficult to measure by surveys or administrative data sources are naturally subject to estimations or extrapolations (e.g. FISIM<sup>11</sup>, CIF/FOB adjustment<sup>12</sup>). Their uncoordinated use could pave the way for discrepancies.
- The methodological standards serve different statistical purposes. As a consequence the manuals are not always specific as regards thematic issues in the mirror statistics (e.g. the concepts of tourism and travel, delineation of goods and services). This leaves room for interpretation when applied by more than one compiler, resulting in different compilation practices due to consistency aspects with other macroeconomic statistics (Box 2).
- Due to the specific objectives in each statistics and the foregone investment in IT
  infrastructure, (automatic) compilation systems are less flexible for being redesigned
  or adapted to new needs. As a consequence compilers generally appear less inclined
  to challenge already established and effectively working operational processes, even
  when their statistical products diverge from each other to some extent (low relative
  discrepancies).
- Institutional peculiarities foster discrepancies arising from different delineations of economic sectors (e.g. captive financial institutions, government-owned banks) or the economic territory<sup>13</sup>.
- Different institutional progress in fully adopting the corresponding statistical standards BPM6 and ESA 2010 also explained to some extent the discrepancies occurring in the past (e.g. the inclusion of FISIM or illegal economic activities).
- Revision and vintage effects always persist as "statistical noise" due to different publication calendars and revision practices. Consequently, zero absolute discrepancies appear only achievable from fully integrated production systems (e.g. United Kingdom).
- 19. In January 2016 the Committee of Monetary, Financial and Balance of Payments Statistics (CMFB)<sup>14</sup> declared consistency between National Accounts and BOP statistics of high relevance and launched a dedicated task force, in order to investigate on possible causes and propose recommendations. This task force consists of compilers from volunteering Member States, Eurostat and the ECB, and investigates in the causes for discrepancies related to both the nonfinancial and financial accounts. The task force aims at analysing causalities based on practical evidence from compilers, and issues recommendations on how to tackle them.
- 20. In January 2017 a first summary report (phase 1) identified 12 thematic issues occurring in the goods and services accounts (Box 1) and provided recommendations with a short- and a long-term view. In the short-term a higher degree of coordination both in national compilation/estimation practices and the choice of data sources should be sought. These entail also endeavours towards a common reading of the methodological standards

<sup>&</sup>lt;sup>10</sup> Obrzut (2016), p. 118

<sup>&</sup>lt;sup>11</sup> Financial Intermediation Services Indirectly Measured (FISIM)

<sup>&</sup>lt;sup>12</sup> Cost Insurance Freight (CIF) and Free On Board (FOB). The standards require an adjustment in order to make export and import transactions comparable.

<sup>&</sup>lt;sup>13</sup> For example, Swiss BOP and National Accounts treat the principality of Liechtenstein differently.

 $<sup>^{\</sup>rm 14}$  Joint coordinating body of the European Statistical System (ESS) and the European System of Central Banks (ESCB)

by BOP compilers and national accountants, in particular where gaps or omissions appear (Box 2)<sup>15</sup>. Better coordination of the revision calendars of Member States is further suggested.

# Box 1: CMFB Task Force on Consistency - 12 Thematic Issues Identified in Goods and Services

- 1. CIF/FOB adjustments
- 2. Illegal trade
- 3. Merchanting
- 4. Processing and repair
- 5. Transit trade
- 6. Goods acquired by tourists and business travel
- 7. Government goods and services n.i.e.
- 8. Package tour expenditures
- 9. FISIM
- 10. Insurance and pension services
- 11. Treatment of special purpose entities
- 12. Other issues 16
- 21. In the long-term the CMFB task force report proposes international initiatives with international organizations (UN, IMF) in order to review the statistical manuals for their full consistency, by excluding contradictory passages and adopting a common terminology. It is finally emphasized that the reduction of discrepancies between National Accounts and BOP statistics within a country should also be complemented by the reconciliation of selected National Accounts and BOP items between countries (i.e. asymmetries)<sup>17</sup>. The work of the task force is still ongoing; in phase 2 it is dedicated to discrepancies in the primary income and financial accounts.

#### Box 2: How to deal with Household consumption abroad

**2.1** The BPM6 considers the expenditure of goods for personal use in another jurisdiction as travel, thus treating it in general as either import or export of services (BPM6, paragraph 10.86). However, the consumption of goods that <u>exceed</u> customs thresholds, such as valuables or consumer durables are regarded as merchandise and therefore considered to be transactions in goods (BPM6, paragraph 10.90)

ESA2010 suggests in line with the BPM6 all expenditure by non-resident tourists and business travellers to be classified as services (ESA2010, paragraph 3.173 i). However, by failing to give a definition of tourists (and business travel), or to specify thresholds for the purchase of valuables and durables abroad, it is not conclusive in the treatment of large household consumptions abroad, such as the import of cars or jewelry for personal use from abroad. As a result national accountants who record these transactions as services would comply with ESA2010, while BOP compilers would record them as transactions in goods according to the BPM6.

<sup>&</sup>lt;sup>15</sup> With great thanks to Mr. Sanjiv Mahajan (Office for National Statistics, UK) for his useful comments.

<sup>&</sup>lt;sup>16</sup> Telecommunications, computer and information, support and waste treatment, transports, manufacturing services in goods owned by others

<sup>&</sup>lt;sup>17</sup> CMFB Task Force Summary Report to Phase 1: https://circabc.europa.eu/sd/a/2ea49095-bd91-41da-83f1-37cf2369e40d/CMFB%202017-01%20-%20Item%20A.9.2%20-%20CMFB%20BOP-NA%20TF%20-%20Final%20report%20on%20phase%201.pdf Contact: estat-cmfb-secretariat@ec.europa.eu

2.2 Household expenditure abroad on smaller amounts (below customs thresholds) is consequently considered as import or export of travel services by the BOP compiler, although international product classifications (CPC) do not distinguish between goods acquired by households or by visitors. As transactor-based service component travel covers an assortment of goods and services and therefore is not separately identified in the CPC (BPM6, paragraph 10.88). In order to bridge this gap BOP compilers use specialised surveys (tourist expenditure) and/or data sources on payments which allow direct identification of relevant transactions as travel (services) item.

Data feeding in the National Account on household final consumption of goods (and services) are derived from a variety of sources, for example, household surveys, expenditure by international passenger type surveys, retail sales surveys, etc. using international product classifications. These may or may not reflect the nature of the household as a resident consumer or a visitor abroad. However, it is important to ensure coherence through the Supply and Use Tables framework (and Input-Output Tables). Any reclassification of transactions in goods for the purpose of tourism or business travel to services (if possible at all) would challenge this coherence. Consequently in recording household final consumption abroad, the National Accounts generally face a trade-off between consistency with BOP or other macroeconomic statistics.

Source: BPM6, ESA2010 - Central Product Classification (CPC 2.1, UN 2015)

#### IV. Conclusions and outlook

- In this paper we investigated whether the current data releases of BOP and National Accounts in the EU-28 reflect the required methodological consistency of the BPM6 and ESA2010 standards. We discovered that discrepancies still persist to an extent of 2% of GDP in the EU-28, but in absolute terms concentrate around a few countries only. We noticed also promising trends towards higher convergence since 2015, but the revision work of European compilers did so far not succeed in achieving full consistency of the two statistics. Studies in the causalities for BOP-ROW discrepancies have shown that the underlying reasons are of more systemic character, resulting from the (decentralised) organisational setup of statistical production processes, different rationales and production calendars applying to both statistics. As a way forward it is suggested that Member States more actively coordinate their statistical products and proceed towards a common reading of the methodological standards. It has been argued that this situation cannot be successfully changed without a cooperative approach ("Nash equilibrium"). International organisations however are challenged with "closing the gaps" in the standards which still foster diverging compilation practices in BOP and National Accounts on one side, while counteracting consistency requirements with other macroeconomic statistics on the other. As a consequence the consistency debate has to be put into perspective and submitted to overall priorities in a multidimensional context, incorporating aspects such as trade asymmetries, etc. as well.
- 23. The case of the Irish National Accounts<sup>18</sup> has illustrated that highly consistent BOP-ROW accounts alone cannot tackle the challenges of globalisation, but countries with consistent statistics have successfully gone through the process of national coordination and

<sup>&</sup>lt;sup>18</sup> Central Statistics Office, Ireland (2016): http://www.cso.ie/en/media/csoie/newsevents/documents/IrelandEconomicGrowthFigures.pdf

seem therefore in better position to adapt to a changing environment. By questioning and reviewing traditionally established operational processes in the light of new challenges, a broader view on global production chains, economic activities of MNEs or cross-border transactions in international trade can be gained, leaving the national domains of monolithical compilation systems<sup>19</sup>. Without consequent (mirror) data confrontations, data sharing in both micro- and macro-data, investigative team work or promoting common views upon the methodological standards beyond the limits of national reasoning, progress appears difficult to achieve.

- 24. Some successful examples of the past have shown that the provision of common access to reference databases from micro data (CSDB<sup>20</sup>) can contribute to more harmonised (financial) statistics. Initiatives in attaining a higher degree of international standardisation of enterprise identifiers and common access to business registers also appear promising<sup>21</sup>, although comprehensive coverage is still an obstacle for a breakthrough. International quality initiatives such as the establishment of an FDI Network<sup>22</sup> have emphasised the prominence of international coordination for the sake of more symmetric statistics on international transactions. In the light of the above experience the following obstacles seem to hamper progress and will prominently remain on statisticians' agenda during the oncoming years:
  - Institutional autonomies and strategic rationales
  - Resource restrictions on human and IT capacities
  - Need for flexibility in adjustment practices among compilers
  - Strict confidentiality regimes
- 25. This list of structural obstacles finally suggests that a paradigm shift is necessary in order to tackle them, by moving away from autonomous statistical compilation systems and rationales towards more systematic cross-border sharing of information, access to common databases, coordinated cross-border profiling (e.g. "early warning systems", "large cases units"), as well as unique and linked identifiers in coordinated registers, in order to tackle the increasing complexities of interlinked economies in a globalised environment.

<sup>&</sup>lt;sup>19</sup> Stapel-Weber/Verrinder (2016)

<sup>&</sup>lt;sup>20</sup> Centralised Securities Database, Pérez/Huerga (2015)

<sup>&</sup>lt;sup>21</sup> Legal Entity Identifier (LEI): https://www.gleif.org/en

<sup>&</sup>lt;sup>22</sup> https://www.imf.org/external/pubs/ft/bop/2014/pdf/14-20.pdf

### References

Central Statistics Office (2016) – Ireland's Economic Growth Figures 2015, Press Release 12<sup>th</sup> July 2016, Corcaigh, Éire

Eurostat (2016) – Consistency between national accounts and balance of payments, Working Paper, Luxembourg 2016

Fontanier F., et al (2016) – Asymmetries in Merchandise trade and trade in services statistics: Introduction to the Country Notes, OECD, Paris 2016

Obrzut R. (2016) – Consistency between national accounts and balance of payments statistics, in: EURONA, Luxembourg 2016

Pérez Cornejo A./ Huerga J. (2015) – The Centralised Securities Database (CSDB): Standardised micro data for financial stability purposes, BIS Working Papers, Basle 2015

Stapel-Weber S./ Verrinder J. (2016) – Globalisation at work in statistics: Questions arising from the 'Irish case', in: EURONA, Luxembourg 2016

BPM6 – Balance of Payments and International Investment Position Manual, Sixth edition, IMF, Washington DC 2009

ESA2010 - European System of Accounts, Eurostat, Luxembourg 2013

14