

Consistency between national accounts and balance of payment statistics — an updated view on the non-financial accounts

2017 edition



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1

Introduction

Since the new standard methodology BPM6/ESA2010 requires full consistency of Balance of Payments (BOP) and National Accounts (NA) statistics¹, an assessment of the consistency between the balance of payments (BOP) and the rest-of-the-world (ROW) account in the national accounts appears justified. Since September 2014 European BOP statistics is compiled according to the international standard BPM6² following the earlier implementation of the European System of Accounts 2010 (ESA2010) in national accounts statistics³.

This paper⁴ gives a brief update on the current situation of inconsistencies in European BOP and NA statistics, based on latest data evidence of April 2017. Then, it will present the results of a survey exercise among European compilers, launched by Eurostat in 2017 on discrepancies observed in the non-financial accounts⁵. This succeeds an earlier survey run by Eurostat in 2015 and provides a realistic picture about the main reasons for inconsistencies between BOP and NA statistics, and the potential improvements gained through revision work in the meantime. After a short description of the parameters and the reconciliation methods of the survey, the major causes for discrepancies are presented, as they were identified by compilers. It will be shown that the conclusions of the preceding survey were not fundamentally challenged, although a significant revision bias occurred this time due to the responses from one Member State. Additionally, conceptual differences were mentioned to a minor extent, although the methodological standards would suggest full consistency of concepts. Consequently, the results will have to be assessed and interpreted into practical conclusions and recommendations. The Committee on Monetary, Financial and Balance of Payments Statistics (CMFB)⁶ has recently through the investigative work of a dedicated task force put the concept of full methodological consistency into perspective and produced recommendations on how to overcome discrepancies in the goods and services accounts of both statistics.

1 BPM6 – Appendix 7, ESA2010 – Chapter 18

2 IMF (2009) – Balance of Payments and International Investment Position Manual, 6th edition (BPM6), Washington D.C.

3 Legal framework for BOP statistics: Regulation (EU) 2016/1013 of the European Parliament and of the Council of 8 June 2016 amending Regulation (EC) No 184/2005 on Community statistics concerning balance of payments, international trade in services and foreign direct investment; and Guideline ECB/2011/23 on the statistical reporting requirements of the European Central Bank in the field of external statistics, as last amended by Guidelines ECB/2013/25 and ECB/2015/39. For NA statistics: Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional account in the European Union.

4 This analysis was conducted by Robert Obrzut, Unit C5 – Integrated Global Accounts and Balance of payments (Eurostat).

5 Similar stock-taking exercises have been previously run by the ECB on discrepancies in the financial accounts.

6 The CMFB is an advisory committee for Eurostat and the ECB and a platform of cooperation between the European Statistical System (ESS) and the European System of Central Banks (ESCB).

2

The current state of BOP-ROW consistency in the non-financial accounts of the EU-28

2.1. The overall picture — the extent of inconsistencies

In view of evidence from data comparisons and surveys⁷ Eurostat had to take note that the BOP and NA statistics of the EU-28 in general cannot be entirely considered consistent. This evidence is clearly in contradiction with the provisions of the methodological standards. The current measures for absolute discrepancies confirm these continued and persistent inconsistencies in some particular components of the European non-financial accounts. In Table 1 we calculated total absolute differences of the EU-28 as sum of measured differences in all 28 Member States. On average, over the period 2010-2016, discrepancies amounted to around EUR 219 billion (1.6% of average EU-28 GDP 2010-2016). In 2015 it reached EUR 298 billion (2.0% of GDP) in the EU.

Table 1: Absolute BOP-ROW discrepancies in the non-financial accounts, sum of EU-28 Member States, 2010-2016
(million EUR)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 (p) |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Goods | 24 638 | 24 209 | 25 188 | 28 048 | 29 620 | 66 192 | 62 678 |
| Services | 62 863 | 61 978 | 68 207 | 65 430 | 86 525 | 112 641 | 118 766 |
| Primary income | 51 115 | 62 906 | 42 300 | 41 633 | 59 426 | 75 061 | 59 510 |
| Secondary income | 33 158 | 32 788 | 36 802 | 33 997 | 33 762 | 33 587 | 25 286 |
| Capital account | 9 707 | 15 480 | 11 264 | 8 171 | 12 435 | 10 749 | 8 307 |
| Total | 181 482 | 197 362 | 183 760 | 177 279 | 221 767 | 298 229 | 274 546 |
| % EU-28 GDP | 1.4 | 1.5 | 1.4 | 1.3 | 1.6 | 2.0 | 1.9 |

Values for 2016 provisional (missing Poland, Bulgaria, Austria); discrepancies=sum of absolute differences BOP minus ROW items in gross transactions in all components of national data. Discrepancies in the capital account are based on net transactions.

Source: Eurostat

Broken down by component (or account), discrepancies are the highest for services, followed by goods and primary income (Table 1). In 2015 discrepancies in the services account went up and above EUR 100 billion (41% of total discrepancies), from already earlier elevated levels, thus services being the major contributor to the overall discrepancies in the non-financial accounts.

Also primary income shows persistently high values, reaching discrepancy levels above EUR 75 billion (27% of total discrepancies) in 2015. Most worryingly, discrepancies in the goods account boosted in 2015 (24% of total discrepancies) from otherwise relatively low levels in earlier periods. Discrepancies in secondary income and capital account on the other hand seem stable (tendency to decrease) and generally less relevant in absolute terms.

⁷ Eurostat Working Paper (2016)

In relative terms (discrepancies in % of the respective total transaction volumes) the picture is slightly different. Among the current account components, discrepancies for secondary income are the most relevant with a multiannual average (2010-2015) of 6%, while services and primary income show moderate discrepancies between 2-3% of the BOP transactions in the respective accounts.

Discrepancies for goods are minor in relative terms due to the traditionally high transaction volumes in the EU-28 BOP (Table 2).

Table 2: Relative BOP-ROW discrepancies in the non-financial accounts, sum of EU-28 Member States, 2010-2016

(percentage of total BOP transactions)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 (p) |
|------------------|------|------|------|------|------|------|----------|
| Goods | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 0.7 |
| Services | 2.6 | 2.4 | 2.5 | 2.3 | 2.8 | 3.3 | 3.4 |
| Primary income | 2.0 | 2.2 | 1.5 | 1.5 | 2.2 | 2.7 | 2.2 |
| Secondary income | 6.7 | 6.3 | 6.8 | 5.8 | 5.7 | 5.5 | 4.1 |

Values for 2016 provisional (missing Poland, Bulgaria, Austria); relative values refer to total transaction volumes (exports and imports) in the BOP component accounts.

Source: Eurostat

2.2. The impact of revisions to discrepancies since October 2015

The ongoing revision practices of Member States since October 2015 have successfully contributed to improvements in achieving consistency, reducing the average level of consolidated (absolute) discrepancies in the EU-28 by almost 24%. For the 2013- and 2014-vintages measured improvements were even higher, reducing discrepancies by 35% and 34%, and in the 2015-vintage by close to 30%⁸. In absolute terms, total (absolute) discrepancies between 2010-2014 dropped from levels around EUR 250/300 billion in October 2015 to around EUR 200 billion in April 2017 with a steady trend for improvement (reducing the overall relative share of consolidated discrepancies from 3% to 2% of EU-28 GDP), while total discrepancies for 2015 have so far only seen little improvement by revisions (Table 3).

Table 3: Absolute BOP-ROW discrepancies in the non-financial accounts, sum of EU-28 Member States, evolution over time, 2010-2015

(million EUR)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Mean 2010-2015 |
|-----------------|---------|---------|---------|---------|---------|---------|-------------------|
| Oct-15 | 250 135 | 255 162 | 283 396 | 269 370 | 314 275 | : | 274 468 |
| Jan-16 | 187 311 | 205 528 | 222 083 | 234 211 | 297 436 | : | 229 314 |
| Apr-16 | 187 288 | 208 028 | 207 868 | 223 739 | 316 819 | 301 630 | 240 895 |
| Jul-16 | 187 266 | 206 865 | 201 359 | 209 181 | 246 980 | 262 711 | 219 060 |
| Oct-16 | 192 620 | 208 768 | 195 054 | 197 012 | 223 821 | 296 374 | 218 941 |
| Jan-17 | 186 495 | 201 617 | 187 081 | 179 900 | 208 032 | 272 403 | 205 921 |
| Apr-17 | 181 482 | 197 362 | 183 760 | 177 279 | 221 767 | 298 229 | 209 980 |
| Growth rate (%) | -27.4 | -22.7 | -35.2 | -34.2 | -29.4 | -1.1 | -23.5 |

Growth rate since first release, negative sign in relative growth rates indicates improvement towards higher consistency..

Source: Eurostat

⁸ Since April 2016, when first provisional values were released for 2015

In the multiannual average 2010-2015 about EUR 274 billion in absolute differences were initially measured in October 2015 for the EU-28 current/capital account⁹. Currently (in April 2017) this multiannual average decreased to around EUR 210 billion. In general, the observed improvements apply to all components of the non-financial accounts, but differ greatly among Member States. If we compare the 2014-vintages of Member States between October 2015 and April 2017, we noticed that 25 of the 28 Member States have generally contributed to this encouraging development, while 3 countries experienced increases in discrepancies (France, Luxembourg and Poland).

Major improvements were achieved by the Netherlands, which reduced their discrepancies by more than EUR 50 billion, most prominently in the primary income account. They were followed by Belgium with improvements by EUR 16 billion, Germany with close to EUR 15 billion and Greece with ca. EUR 10 billion. On the other hand, France saw an increase in discrepancies to its 2014-vintage of EUR 2.3 billion, fostered by deteriorations in primary income and goods, offsetting measured improvements in services (Table 4).

Table 4: The impact of revisions to BOP-ROW discrepancies in the non-financial accounts, by EU-28 Member States, 2014
(million EUR)

| | Goods | Services | Primary income | Secondary income | Capital account | Total | Relative change (%) |
|----------------|--------|----------|----------------|------------------|-----------------|----------------|---------------------|
| Belgium | -1 600 | -4 383 | -7 323 | -1 257 | -1 455 | -16 018 | -79.6 |
| Bulgaria | - 766 | - 636 | 342 | - 99 | - 364 | -1 523 | -55.3 |
| Czech Republic | - 688 | - 14 | -1 177 | - 191 | - 580 | -2 650 | -37.0 |
| Denmark | -2 035 | -2 394 | - 174 | - 135 | - 20 | -4 758 | -99.9 |
| Germany | -9 527 | 4 191 | 4 264 | 1 047 | -14 920 | -14 945 | -34.5 |
| Estonia | - 1 | - 1 | - 38 | 21 | - 394 | - 412 | -92.1 |
| Ireland | -1 204 | -1 202 | - 4 | -4 546 | 0 | -6 956 | -99.4 |
| Greece | -3 398 | -1 104 | 2 354 | - 12 | -7 913 | -10 073 | -45.4 |
| Spain | 1 | 419 | 36 | - 254 | -1 643 | -1 441 | -57.0 |
| France | 3 152 | -15 163 | 12 494 | 654 | 1 141 | 2 278 | 2.4 |
| Croatia | - 20 | - 123 | - 9 | 53 | - 81 | - 179 | -34.1 |
| Italy | - 18 | - 229 | 23 | 18 | -3 727 | -3 933 | -86.9 |
| Cyprus | 0 | - 1 | - 400 | 0 | 0 | - 401 | -99.3 |
| Latvia | 0 | 0 | - 32 | 0 | 0 | - 32 | -91.4 |
| Lithuania | - 1 | 0 | - 47 | 10 | - 1 | - 38 | -30.3 |
| Luxembourg | 1 201 | 3 280 | NA | NA | NA | 4 481 | 36.2 |
| Hungary | -3 007 | -1 380 | 36 | - 45 | 5 | -4 391 | -95.2 |
| Malta | - 3 | - 254 | - 227 | NA | 1 | - 483 | -57.9 |
| Netherlands | 147 | 113 | -49 084 | - 414 | -1 148 | -50 386 | -72.7 |
| Austria | - 151 | 554 | - 693 | - 32 | - 435 | - 757 | -26.8 |
| Poland | - 1 | 197 | 146 | - 21 | 0 | 321 | 3.7 |
| Portugal | 320 | 8 | - 540 | 46 | - 9 | - 175 | -1.4 |
| Romania | - 904 | - 111 | - 503 | 79 | - 7 | -1 446 | -45.7 |
| Slovenia | 66 | - 30 | 62 | - 296 | - 349 | - 548 | -45.7 |
| Slovakia | - 25 | 14 | - 114 | - 606 | - 101 | - 833 | -32.4 |
| Finland | - 79 | 159 | -2 405 | 50 | - 6 | -2 280 | -51.7 |
| Sweden | - 437 | -1 578 | -1 661 | -1 326 | - 747 | -5 749 | -49.9 |
| United Kingdom | 0 | 0 | - 1 | 1 | -1 169 | -1 168 | -99.4 |

Differences in absolute discrepancies measured between October 2015 and April 2017. A negative sign indicates reduction of discrepancies, a positive sign increase of discrepancies since October 2015.

Source: Eurostat

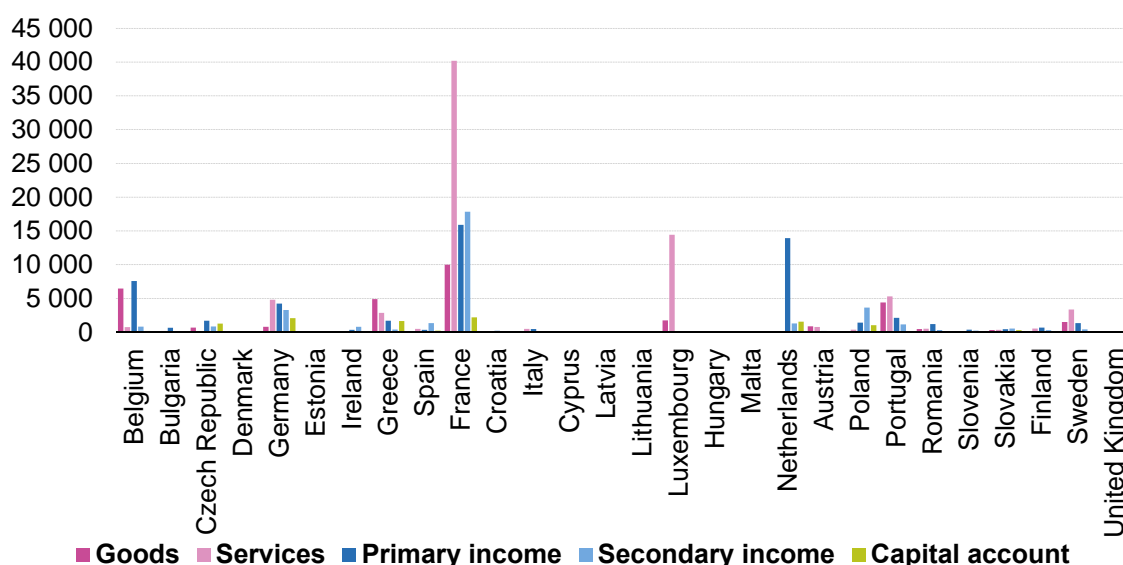
⁹ Discrepancies in the current/capital account are the sum of discrepancies occurring in the respective component accounts.

2.3. Absolute BOP-ROW discrepancies by EU Member States

Measuring discrepancies in absolute terms appears the most straightforward way, as it reflects the situation “as it is” and avoids offsetting effects through positive and negative values. However, countries with higher transaction volumes appear more prominent, while countries with less transaction volumes get less attention in such measures. Absolute measures can effectively show who contributes the most to the overall EU discrepancies, but downplay potential problems in small Member States.

The current situation in the EU-28 is very heterogeneous. Six Member States show absolute discrepancies of above EUR 10 billion in their multiannual average (2010-2015), contributing together to currently more than 75% of total average discrepancies (France, Belgium, Greece, Luxembourg, the Netherlands and Portugal). As a consequence, improvements to consistency in these countries could prominently contribute towards significant improvements in the overall EU-28 discrepancies. On the other hand 7 countries show very low¹⁰ or no discrepancies (Denmark, Estonia, Ireland, Lithuania, Latvia, Cyprus and United Kingdom) (Figure 1).

Figure 1: Absolute discrepancies, by components and EU-28 Member States, mean 2010-2015 (million EUR)



Discrepancies in country data are based on average differences 2010-2015. QSA data are missing for Luxembourg (primary income, secondary income, capital account) and Malta (secondary income)

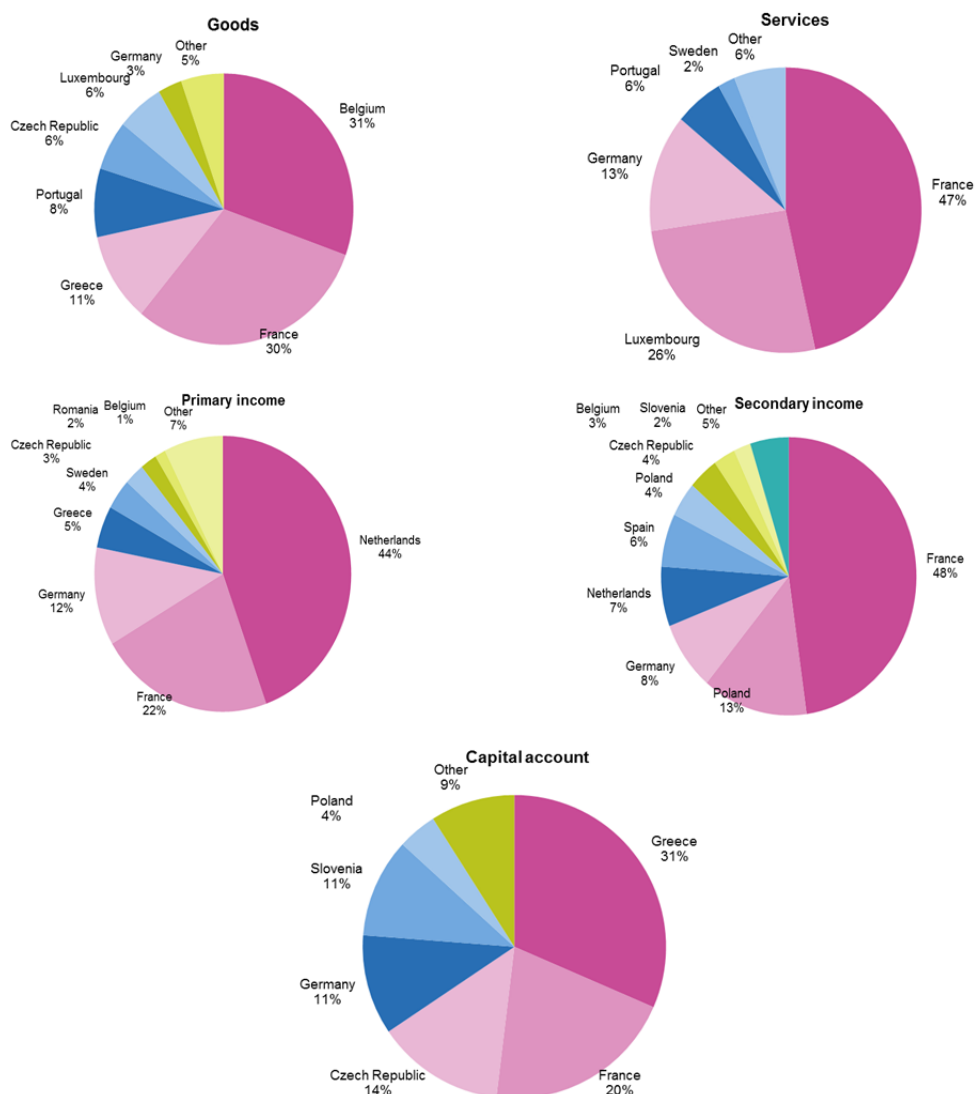
Source: Eurostat

Dutch discrepancies in the primary income account decrease considerably, when measuring differences on net balances in both statistics, which indicates a systematic bias in the differences for gross transactions (different data collection frameworks for its non-financial corporation sector).

In at least two of the above mentioned countries, discrepancies for goods and services are almost symmetric (Portugal, Greece). This has been explained by diverging classification practices of cross-border transactions as goods or services, and is based on different interpretations of the methodological standards. For goods the increase in discrepancies for 2015 was mainly caused by France and Belgium. Belgium relates these differences to the applied balancing and reconciliation practices in both statistics.

¹⁰ Referring predominantly to revision and vintage effects in the underlying data

Figure 2: Exposure to absolute discrepancies in the components of the non-financial accounts, by EU-28 Member States, 2015
(percentage of total EU discrepancies)



Relative discrepancies in percentage of total absolute discrepancies in the component accounts

Source: Eurostat

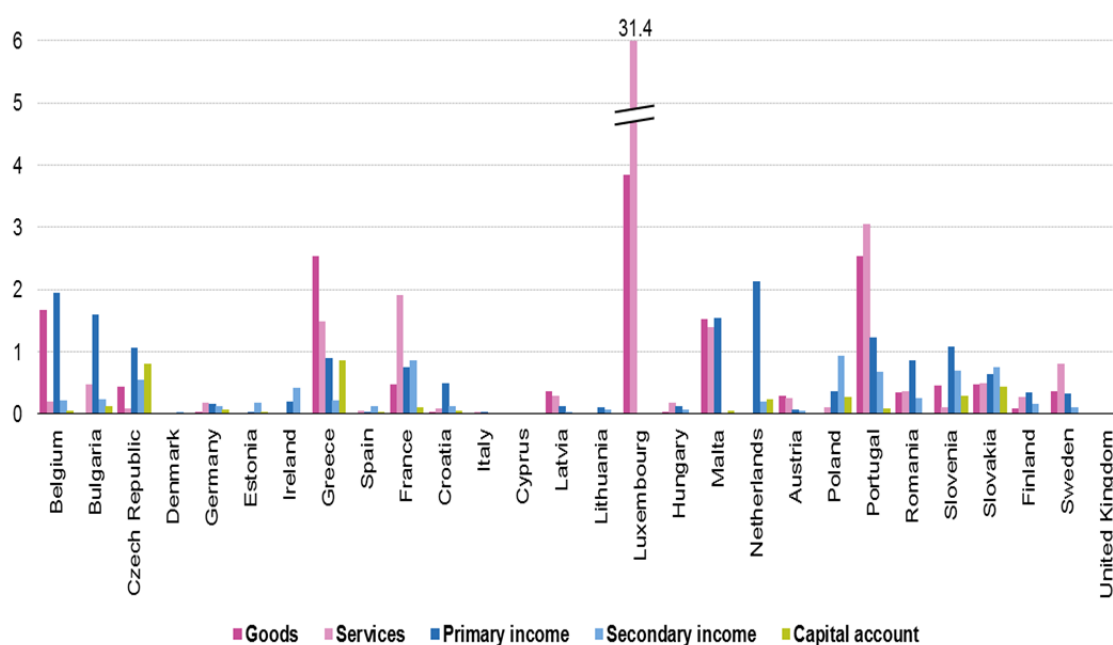
Looking to 2015 data, the major contributors to the overall EU discrepancies can be identified in Figure 2. The picture emphasises the high concentration of discrepancies around few countries. Absolute discrepancies in the goods account predominantly originated from Belgium and France, in services from France and Luxembourg, in primary income the Netherlands and France, in secondary income France and Poland, and in the capital account Greece and France. It appears noteworthy that in all the accounts only two Member States contribute to more than 50% of all EU discrepancies. Although the country pairs change, the high representation of France is obvious among the mentioned countries. From a European perspective, this suggests reconciliation measures to be defined in a country-specific context and all countries with a significant contribution to discrepancies in goods, services or primary income should address their issues, in order to achieve overall significant improvements to EU discrepancies.

2.4. Relative BOP-ROW discrepancies by EU Member States

Relative measures can better incorporate a “country view” to the analysis. The measured discrepancies are related to the countries’ GDP or total transaction volumes. This allows spotting countries and accounts with the largest problems and defines priorities under a regime of resource restrictions.

In relative terms (% of GDP) the measured discrepancies appear less significant in most Member States with EU-medians not exceeding 0.3% of GDP for the individual accounts. Luxembourg shows a high relative discrepancy in services (31% of its GDP) and in goods 4%. It is followed by Portugal, with 3% respectively in goods and services, and Greece 3% in goods and 2% in services (Figure 3).

Figure 3: Relative discrepancies, by components and EU-28 Member States, mean 2010-2015 (percentage of GDP)



Discrepancies in country data are based on average differences 2010-2015.

Source: Eurostat

When measuring relative discrepancies as a share of the respective total BOP transactions, the results become more conclusive (Table 5). Due to the smaller total transaction volumes involved, relative discrepancies in secondary income appear more prominent with values above 20% (of total transactions) in Poland, France and Slovakia. In primary income, high relative discrepancies (values above 10%) are recorded for Bulgaria, Romania, Slovenia and Greece. Relatively high discrepancies are also measured in services for Portugal, Luxembourg and France, while values in goods remain moderate in all countries due to the higher transaction volumes in this component (highest in Greece with close to 7%).

Table 5: Relative discrepancies in the current account, EU-28 Member States, mean 2010-2015
(percentage of total BOP transactions)

| | Goods | Services | Primary income | Secondary income |
|----------------|-------|----------|----------------|------------------|
| Belgium | 1.4 | 0.5 | 7.7 | 3.9 |
| Bulgaria | 0.0 | 2.1 | 18.4 | 3.2 |
| Czech Republic | 0.3 | 0.4 | 8.4 | 15.0 |
| Denmark | 0.0 | 0.0 | 0.0 | 0.7 |
| Germany | 0.0 | 1.1 | 1.3 | 2.2 |
| Estonia | 0.0 | 0.0 | 0.2 | 3.8 |
| Ireland | 0.0 | 0.0 | 0.3 | 7.6 |
| Greece | 6.7 | 6.8 | 11.3 | 7.0 |
| Spain | 0.0 | 0.3 | 0.3 | 3.6 |
| France | 1.1 | 11.3 | 5.8 | 26.3 |
| Croatia | 0.1 | 0.3 | 7.4 | 2.1 |
| Italy | 0.0 | 0.3 | 0.4 | 0.0 |
| Cyprus | 0.0 | 0.0 | 0.0 | 0.1 |
| Latvia | 0.4 | 1.1 | 1.2 | 0.4 |
| Lithuania | 0.0 | 0.0 | 1.4 | 0.9 |
| Luxembourg | 5.0 | 12.7 | NA | NA |
| Hungary | 0.0 | 0.6 | 0.4 | 1.6 |
| Malta | 1.7 | 0.7 | 0.6 | NA |
| Netherlands | 0.0 | 0.0 | 3.0 | 4.0 |
| Austria | 0.4 | 1.0 | 0.3 | 1.7 |
| Poland | 0.0 | 0.7 | 4.1 | 30.8 |
| Portugal | 4.4 | 16.3 | 8.9 | 11.6 |
| Romania | 0.5 | 2.6 | 18.6 | 4.6 |
| Slovenia | 0.4 | 0.5 | 13.8 | 13.3 |
| Slovakia | 0.3 | 2.9 | 5.8 | 25.6 |
| Finland | 0.2 | 1.2 | 2.4 | 6.9 |
| Sweden | 0.6 | 3.4 | 1.6 | 2.9 |
| United Kingdom | 0.0 | 0.0 | 0.0 | 0.0 |

Relative values refer to total transactions (exports plus imports) in the BOP component accounts.

Source: Eurostat

2.5. Directional inconsistencies — challenge to comparability

Opposite signs in the account balances pose a considerable challenge to the economic reading of the concerned statistics. Currently we notice 5 incidences in the EU, where opposite signs occur in the non-financial accounts of BOP and QSA for 2015, accurately in those countries which also show significant discrepancies in the affected components.

France is a net exporter in BOP services by EUR 8.8 billion, but a net importer in QSA services by almost the same amount (2014: net BOP exports of EUR 16.9 billion against net QSA imports of EUR 5.6 billion). In its capital accounts additionally it appears as net exporter of EUR 2.1 billion in BOP, but minor net importer of EUR -0.1 billion in its QSA. While the Luxembourg BOP balance for goods is negative (EUR -2.6 billion), in Luxembourg's QSA it appears positive (EUR +1.7 billion). Belgium is a net importer in its BOP primary income account (EUR -0.9 billion), but a minor net exporter in the corresponding QSA (EUR +0.1 billion). Poland reported net imports in its BOP

secondary income account of EUR 0.8 billion, but net exports in the corresponding QSA of EUR 3.1 billion¹¹.

These 5 incidences could either be based on deviating reporting or sign conventions, or illustrate the most dramatic consequences of inconsistent time series, thus paving the way for contradictory conclusions.

Table 6: Balances in the components of the non-financial accounts, 2015
(million EUR)

| | Goods | | Services | | Primary income | | Secondary income | | Capital account | |
|----------------|----------|----------|----------|---------|----------------|---------|------------------|---------|-----------------|---------|
| | BOP | QSA | BOP | QSA | BOP | QSA | BOP | QSA | BOP | QSA |
| Belgium | 2 579 | 1 112 | 6 770 | 5 739 | - 869 | 149 | -6 666 | -6 339 | 113 | 113 |
| Bulgaria | -2 623 | -2 623 | 3 004 | 2 691 | -2 082 | - 908 | 1 640 | 1 797 | 1 422 | 1 122 |
| Czech Republic | 6 872 | 7 468 | 2 861 | 2 748 | -9 357 | -10 979 | - 8 | -1 293 | 3 720 | 5 189 |
| Denmark | 13 588 | 13 587 | 6 528 | 6 528 | 9 108 | 9 110 | -4 343 | -4 342 | - 965 | - 963 |
| Germany | 261 181 | 263 170 | -18 602 | -33 631 | 57 369 | 66 014 | -39 988 | -38 503 | - 633 | -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 | 603 | - 521 | - 733 | 1 988 | 5 375 |
| 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 | -48 550 | 2 075 | - 116 |
| Croatia | -6 664 | -6 663 | 7 899 | 7 889 | - 279 | 142 | 1 266 | 1 215 | 277 | 323 |
| Italy | 50 730 | 50 725 | -2 750 | -2 832 | -9 217 | -9 138 | -15 028 | -15 029 | 2 627 | 2 608 |
| 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 | 1 278 | 20 358 | 16 882 | -15 942 | : | 880 | : | - 595 | : |
| Hungary | 4 408 | 4 374 | 5 402 | 5 398 | -5 134 | -5 140 | -1 102 | -1 195 | 5 130 | 5 132 |
| Malta | -1 877 | -1 804 | 2 608 | 2 531 | - 479 | - 377 | 243 | : | 167 | 165 |
| Netherlands | 76 147 | 76 144 | -3 180 | -3 217 | -2 433 | -2 452 | -10 965 | -13 118 | -33 966 | -33 860 |
| Austria | 1 499 | 2 059 | 10 016 | 11 565 | -1 641 | -1 855 | -3 384 | -3 368 | -1 750 | -1 679 |
| Poland | 2 214 | 2 214 | 10 918 | 11 091 | -14 937 | -15 931 | - 848 | 3 148 | 10 161 | 9 710 |
| Portugal | -9 271 | -7 712 | 12 436 | 9 018 | -4 548 | -5 151 | 1 506 | 2 493 | 2 108 | 1 816 |
| Romania | -7 791 | -7 773 | 6 791 | 6 790 | -3 771 | -3 062 | 2 790 | 3 081 | 3 897 | 3 897 |
| Slovenia | 1 498 | 1 498 | 2 019 | 2 020 | - 982 | - 885 | - 537 | - 566 | 371 | 386 |
| Slovakia | 2 017 | 1 806 | 157 | 102 | - 812 | -1 282 | -1 231 | - 511 | 2 790 | 1 653 |
| Finland | 1 964 | 2 280 | -2 049 | -2 904 | 1 162 | 1 754 | -2 321 | -2 585 | 160 | 82 |
| Sweden | 12 185 | 13 422 | 9 957 | 7 802 | 6 262 | 6 825 | -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 |

(:) data not available; positive sign means net exporter (exports higher than imports); negative sign means net importer (imports higher than exports).

Source: Eurostat

¹¹ The difference in the Polish secondary income accounts is mainly due to discrepancies in the treatment of the EU structural funds. The EU transfers in the BOP are recorded on cash flow basis, whereas data in NA are on accrual basis due to different data sources. It is envisaged by the Polish compilers to harmonise this issue in near future.

3

Reasons for discrepancies in the non-financial accounts — the Eurostat survey 2017

3.1. Parameters and methods of reconciliation in the survey

Regular data comparisons of quarterly BOP statistics and the rest of the world (ROW) sector account are conducted by Eurostat since October 2015 after the introduction of the BPM6 standard in European BOP statistics. Since then Eurostat is able to assess the evolution of consistency over time between the two statistics with a particular interest in the non-financial accounts¹². Although available time series are reported by some Member States even back to 1999, reliable data comparisons across the EU-28 appear currently feasible and meaningful between 2010 and 2015. Data are compared from quarterly statistics, thus effectively reflecting back data revisions during the compilation year. Discrepancies are measured on gross transactions in the underlying non-financial 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 7).

The data confrontation of the BOP accounts with the respective QSA accounts (ROW sector) requires a clear convention on reconciling the accounts, in order to gain a common understanding of discrepancies. The non-financial accounts appear directly comparable. Consequently, we focused on the component accounts in both statistics, in order to identify consistency issues related to the respective accounts, which would be otherwise offset in the total accounts. An extended analysis on more granular items proved difficult due to partially unavailable data or limitations in the transmission programme to Eurostat¹³.

The data comparison is based on the assumption that vintages released during the same month are comparable¹⁴. This could result in some specific cases in a revision or vintage bias. However, except for the current production year we would not expect this bias to be prominently present in the back data.

After the implementation of the BPM6 Eurostat launched a survey in 2015, which provided a first snapshot on the nature of discrepancies¹⁵. It concluded that the decentralised setup of statistical production processes in BOP and NA in many EU Member States could generally explain persistently high levels of inconsistencies, and a move towards more integrated or at least better coordinated production processes would be desirable.

¹² The transmission programme to Eurostat does not comprise all necessary components data in order to conclusively analyse the financial accounts in more details. About the limitations in analysing the financial account see Obrzut (2016), p.113 f.

¹³ For example – while BOP publishes the standard industries of services according to the BPM6, the sector accounts do not release such breakdowns. As a consequence, it remains highly speculative from what items the measured discrepancies in services arise.

¹⁴ Sector accounts are published three weeks after the BOP data release in quarterly statistics.

¹⁵ Eurostat Working Paper (2016)

Table 7: Reconciling current/capital (BOP) and the ROW non-financial account (QSA)

| BOP component | ROW NA 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 non-financial non-produced assets |

BOP and NA items according to BPM6 and ESA2010.

In December 2016 Eurostat launched this survey again (as a biannual exercise), based on the data releases of October 2016 in the corresponding quarterly statistics of the non-financial accounts. The prefilled questionnaires were sent to the EU Member States for being complemented with explanations and their quantitative impact from the involved compilers. 24 Member States replied to this questionnaire exercise (86%), 4 Member States did not respond (Bulgaria, Croatia, Slovakia and Finland). Hence, around 94% of annual average discrepancies 2010-2015 could be explained through this exercise.

3.2. Main reasons for discrepancies according to the Eurostat survey

Member States compilers explained the observed discrepancies in their statistics by using a structured and internationally agreed typology (list of possible reasons), which facilitates comparability of the results with other similar surveys and stock-taking exercises on discrepancies. The typology is structured into 9 major categories:

1. Methodological differences
2. Vintage and revision differences
3. Different balancing and reconciliation practices
4. Different coverage
5. Omissions
6. Different data sources
7. Different estimation methods
8. Compilation errors
9. Other non-specified reasons

Compilers had the opportunity to specify the identified causes by providing more detailed specifications via a list of sub items for each component account, or by explanatory notes in free text format. In particular categories 3–7 point at underlying coordination issues between two compiling institutions (where applicable), e.g. when different calculations to CIF/FOB adjustments, different estimations of FISIM and income flows related to SPEs, or different sector coverage/delineations apply. Ideally these issues can be addressed by a higher degree of national coordination between compilers. However, these issues become “structural” when firm institutional autonomies apply in some national jurisdictions that would not support “quick fixes”.

Vintage and revision differences (category 2) and compilation errors (category 8) may occur, but are data-driven issues. They consequently provide less information on the nature of discrepancies, but help to draw the attention to different revision and production calendars and their need for more harmonisation in the EU-28; or they are perceived as a useful quality intervention where major compilation errors are spotted.

To international organisations the occurrence of methodological differences (category 1) is most interesting, as the statistical manuals would not foresee any such diverging concepts in the data evidence leading to significant discrepancies. Whether these differences occur due to inconsistencies in the manuals or rather their interpretation by the compiling institutions is to be assessed. Table 8 summarises the major reasons, as they were communicated to us by the respective Member States. They cover all explained discrepancies between 2010 and 2015 and are presented in percentages of total discrepancies for easier reading.

Table 8: Reasons for BOP-ROW discrepancies in the non-financial accounts, 2010-2015
(% of total discrepancies)

| Reason of discrepancy | % |
|--|------|
| Vintage and revision differences | 38.1 |
| Different data sources | 31.8 |
| Methodological differences and interpretations | 11.8 |
| Different estimation methods | 6.0 |
| Different balancing and reconciliation practices | 5.1 |
| Reclassifications Services and Goods | 4.4 |
| Errors identified | 1.6 |
| Merchanting | 0.8 |
| Different coverage | 0.3 |
| Other | 0.1 |

BOP-ROW survey 2017

Source: Eurostat

Vintage and revision differences

The survey revealed a strong revision bias in the data. 38% of all explained discrepancies occurred due to vintage and revision differences, this is clearly deviating from the extent of vintage and revisions effects in the previous survey in 2015. Some countries explicitly claimed that comparable vintages for the sector accounts became available at a later point in time (Hungary, Austria). However, of general relevance this issue most significantly concerned goods (France), services (France) and primary income (Netherlands, Belgium, France) in the survey. France attributed more than 80% of its explained discrepancies to vintage and revision effects. As a consequence the French contributions can be considered as the major reason for the revision bias in the survey¹⁶. However, it is emphasised that European compilers of BOP and NA are currently working towards more harmonised revision and production calendars¹⁷, which aim at reducing the impact of vintage and revision effects in future.

Different data sources

As prominent reason for discrepancies the use of different data sources (32%) was identified by compilers. More specifically the use of separate reporting frameworks (Netherlands), different compilation practices in financial services and/or e-commerce (Luxembourg), consistency in compiling primary/secondary income and capital account components with the Excessive Deficit

¹⁶ In the previous BOP-ROW survey 2015 France did not participate.

¹⁷ Final Report of the Task Force on the European Harmonised Revisions Policy – CMFB, February 2017 <https://circabc.europa.eu/sd/a/2d50c77c-6da7-4e5a-9801-6375df8f332/CMFB%202017-01%20-%20Item%20A.8.1%20-%20Final%20report%20of%20the%20CMFB%20TF-HERP.pdf>

Procedure (Germany), a historic issue (2010-2013) with the recording of natural gas transits (Belgium), or more generally the different frequencies of data sources which compilers are facing (annual versus monthly/quarterly surveys). The issue concerned most significantly the compilation of services (Luxembourg), primary (Netherlands) and secondary income components (Germany, France).

Methodological differences

As a third reason methodological differences were mentioned (12%), including the different interpretation of the standards due to gaps and omissions in the manuals. This appears of particular interest in the light of the fully harmonised methodologies, and points at a need for more specification in the standards. One Member State explicitly mentioned in this context deviating methodologies in compiling cross-border services of “IP-Boxes” (Luxembourg)¹⁸. IP-Box regimes also occur in other jurisdictions of the EU-28 (Cyprus, Hungary, Belgium, Netherlands, United Kingdom) an exchange of practices between the BOP compilers and national accountants appears instrumental on this issue¹⁹. In the primary income particularly property income (Belgium, Portugal, Poland), in the secondary income other current transfers (Poland) are exposed. Poland identified also methodological differences in compiling its capital account. From the available replies we cannot completely exclude that methodological differences and particularly different interpretations of the standards implicitly apply also to issues, which were otherwise identified under different reason types in this survey by the compilers.

Different estimation methods

Due to different estimation methods around 6% of discrepancies occurred by applying diverging allocation of FISIM (Ireland, Sweden, Greece, Spain) or CIF/FOB adjustments (Denmark, Sweden, Greece). Different estimation methods further apply to the rental value of owner occupied dwellings (Slovenia), different estimation of reinvested earnings (Belgium, Greece), different treatment of goods procured in ports by carriers (Greece) and the compilation of government goods and services n.i.e. (Greece).

Other reasons

More generally **different balancing and reconciliation practices** assume 5% of overall discrepancies, and most significantly apply to Belgium and Luxembourg. **Different coverage** assumed around only 0.3%, although it revealed that some Member States still experience gaps in the coverage of illegal activities (Portugal, Greece) or insufficiently cover the insurance sector in their national accounts (Slovenia). One country identified different coverage in the compilation of specific personal transfer items (D6, Sweden).

Ca. 4% of causes were attributed to **reclassification practices between goods and services**. It appears that the standards leave room for interpretation when it comes to the exact delineation of these two components in regard to cross-border household expenditure. Major differences most particularly relate to travel (Portugal, Greece)²⁰, or to cross-border acquisitions of resident households via e-commerce platforms (Luxembourg). **International recommendations have so far focused on the consistent treatment in BOP and NA, but abstracted from the dilemma in challenging through their recommendation the consistency to other macroeconomic statistics (Supply and Use tables).**

In the light of the above we conclude that although vintage and revision effects played a prominent role in the survey (revision bias caused by France), almost 50% of the explained discrepancies were

18 Intellectual Property-Boxes (“IP-Boxes”) are a widely used instrument for tax incentives to research and development activities.

19 European Parliament: Intellectual Property Box Regimes – In-Depth Analysis for the TAXE Special Committee, Brussels, October 2015
[http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563454/IPOL_IDA\(2015\)563454_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563454/IPOL_IDA(2015)563454_EN.pdf)

20 According to the Portuguese compiler the described problem does not relate to a lack of interinstitutional coordination, but the dilemma of conflicting consistency requirements of the National Accounts with the Input-Output tables.

originating from coordination issues due to different compilation/estimation practices, the use of particular data sources, different coverage, or in reading the methodological standards according to the needs of the respective compiler. In particular, different readings of the standard point at gaps and omissions in BPM6 and ESA2010, which have been subject to recent investigations by a dedicated CMFB task force in the context of discrepancies in the goods and services accounts²¹. From this perspective compilers do not entirely confirm the standards' claim of a fully harmonised terminology²².

3.3. Patterns of discrepancies by component accounts

Goods

In line with the overall results, different vintage and revision effects make up the most prominent part in explaining discrepancies in goods. However, almost 20% were attributed to different balancing and reconciliation practices (Belgium, Luxembourg, Sweden). These were explained by NA compilers' need for flexibility in order to balance the national accounts. A very important cause for discrepancies is also large reclassifications from services to goods (Greece, Portugal, Sweden), and to a lesser extent also from goods to services, which is to be related to households expenditure abroad and the concept of (business) travel. The use of different data sources, although amounting to 11% of the discrepancies, relates only to historical issues related to data 2010-2013²³. Different interpretation of the standards prevails for about 5% of all discrepancies, relating to transactions in e-commerce and acquisitions abroad of goods by resident households (Luxembourg), while different estimation methods, predominantly related to the CIF/FOB adjustments (Sweden, Denmark) and the statistical treatment of goods procured in ports by carriers (Greece). Discrepancies in the context of merchanting were related to a vintage effect (Austria) and different frequencies of the data sources (Luxembourg). As a minor detail, in Portuguese BOP, illegal economic activities are not yet covered.

Table 9: Explained discrepancies in goods, by stated reason, 2010-2015
(% of total discrepancies)

| Goods | % |
|--|------|
| Vintage and revision differences | 29.3 |
| Different balancing and reconciliation practices | 19.0 |
| Reclassifications from services to goods | 18.8 |
| Different data sources | 11.3 |
| Different interpretation of standards | 5.4 |
| Merchanting | 5.4 |
| Different estimations methods | 5.3 |
| Reclassifications from goods to services | 4.7 |
| Methodological differences | 0.9 |
| Other | 4.1 |

BOP-ROW survey 2017

Source: Eurostat

21 Final report on Phase 1 of the CMFB Task Force on the consistency between national accounts and balance of payments statistics – CMFB, February 2017 <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>

22 BPM6, Appendix 7, paragraph A7.4

23 This suggests future data comparisons rather to focus on the more recent periods starting with 2014, in order to separate historical issues and provide a picture of ongoing revision work.

Services

In services the most prominent explaining factor for discrepancies is also revision and vintage effects. They make up more than 40% of the discrepancies. The use of different data sources (21%) is related in particular to e-commerce, financial services, travel services and different frequencies of data sources (annual, monthly). Methodological differences (11%) were identified by 5 countries (Czech Republic, Italy, Luxembourg²⁴, Poland and Portugal), which will be further investigated. Different estimation methods greatly apply in the context of CIF/FOB adjustments, FISIM allocation (Denmark, Spain, Greece and Sweden) and rental value of owner occupied dwellings (Slovenia). Reclassification practices between goods and services and vice versa (10%) play clearly an important role in explaining discrepancies in this account. They were mentioned by Greece, Malta, Portugal and Sweden. Different estimation methods relate to the calculations of FISIM (Ireland, Latvia). Although different coverage is not prominent, Slovenian National Accounts do not cover direct insurance services.

Table 10: Explained discrepancies in services, by stated reason, 2010-2015
(% of total discrepancies)

| Services | % |
|--|------|
| Vintage and Revision differences | 44.5 |
| Different data sources | 20.5 |
| Methodological differences | 10.6 |
| Reclassification from services to goods | 8.1 |
| Different estimation methods | 8.0 |
| Different balancing and reconciliation practices | 5.1 |
| Reclassification from goods to services | 2.0 |
| Different compilation practices | 0.3 |
| Other | 0.8 |

BOP-ROW survey 2017

Source: Eurostat

Primary income

Also in primary income almost half of all discrepancies were attributed to revision and vintage effects. Second to this, the use of different data sources (32%) is a predominant explaining factor. It occurred due to separate reporting frameworks (Netherlands)²⁵, better or more granular data sources in one or the other statistics and/or other statistical requirements²⁶ (France, Germany). Also in primary income methodological differences explain 13% of the discrepancies, which require further investigations. Most prominently they apply to the compilation of property income (D4), the treatment of super-dividends and interim-dividends (Belgium). Different estimation methods (5%) prevail in the calculations of FISIM and reinvested earnings. One country mentions conflicting GNI requirements on property income which challenges BOP-ROW consistency (Greece). To a much lesser extent different interpretation of standards occurs to the statistical treatment of other primary income²⁷ (Belgium); different compilation practices refer to the recording of subsidies in agriculture (Slovenia, Lithuania), calculation of other investment income for reinsurance only in National Accounts

²⁴ Methodological issues are currently clarified with Eurostat in regard to the treatment of IP-Boxes. Subsequently BOP and NA compilers intend to align their compilation practices in Luxembourg on the occasion of the next national benchmark revision by 2020.

²⁵ The Netherlands plan an integrated data collection on non-financial corporations by 2019. By mid-2018 the Dutch compilers expect fully consistent figures for the years 2015 and later and considerable improvements for the earlier years.

²⁶ Excessive Deficit Procedure

²⁷ Taxes paid to other sectors (D2)

(Slovenia), or the compilation of compensation of employees (Greece). Different coverage applies in general (Spain), or is specifically related to the treatment of rents (Austria).

Table 11: Explained discrepancies in primary income, by stated reason, 2010-2015
(% of total discrepancies)

| Primary income | % |
|---------------------------------------|------|
| Vintage and Revision differences | 47.6 |
| Different data sources | 31.6 |
| Methodological differences | 12.7 |
| Different estimation methods | 5.1 |
| Different interpretation of standards | 0.5 |
| Different compilation practices | 0.3 |
| Different coverage | 0.2 |
| Other | 1.9 |

BOP-ROW survey 2017

Source: Eurostat

Secondary income

Contrary to the other current account components revision and vintage effects only play a minor role (8%) in explaining discrepancies in the secondary income accounts; the use of different data sources is the predominant sources of inconsistencies (74%), concerning in particular the compilation of other current transfers (D7). The requirements arising from the Excessive Deficit Procedure (EDP) in National Accounts are mentioned as the most important reason by Germany. The EDP requirements emphasise the traceability to individual transactions with the rest of the world, i.e. higher levels of granularity, which the BOP does not provide. As a consequence the National Accountant has to resort to more specialised data sources²⁸. The availability of more adequate sources to the compiler applies when compiling current taxes on income and wealth (D5; Germany, France), and the treatment of non-life insurance premiums and claims in other current transfers (D7; Belgium). Methodological differences (13%) were spotted in compiling social benefits and contributions (D6; France, Romania) and other current transfers (D7; Czech Republic, Poland, Portugal). Different coverage is referred to social benefits and contributions (Sweden) and the aforementioned non-coverage of direct insurances in National Accounts (Slovenia).

Table 12: Explained discrepancies in secondary income, by stated reason, 2010-2015
(% of total discrepancies)

| Secondary income | % |
|--|------|
| Different data sources | 73.7 |
| Methodological differences | 12.6 |
| Vintage and Revision differences | 8.4 |
| Different coverage | 1.5 |
| Different estimation methods | 0.8 |
| Different balancing and reconciliation practices | 0.4 |
| Different compilation practices | 0.3 |
| Different interpretation of standards | 0.2 |
| Other | 2.0 |

BOP-ROW survey 2017

Source: Eurostat

²⁸ Concerning for example multilateral development banks, taxation of dividend payments, debt cancellations with development aid, payments from central government to European aid programmes, or the treatment of EU funds

Capital account

Due to the unavailability of gross transactions from the QSA²⁹, the survey had to compare net transactions between BOP and ROW in the capital account. The most prominent reason for discrepancies is the use of different data sources (49%). Like in secondary income, EDP data granularity requirements and/or better adequacy of data sources prevail (Germany, France, Greece, Portugal and Sweden). Methodological differences (12%) were reported by Poland, while different estimation methods are identified in relation to accrual recording (Czech Republic). In the context of the survey, also a prominent error was identified in the ROW in one Member State, thus underlining the positive quality impact of such survey exercises. Vintage and revision differences apply to a much lesser extent than in the current account; they mostly refer to the different revision calendars in both statistics (in at least 12 Member States).

Table 13: Explained discrepancies in the capital account, by stated reason, 2010-2015
(% of total discrepancies)

| Capital account | % |
|--|------|
| Different data sources | 48.9 |
| Error identified in ROW | 14.0 |
| Methodological differences | 12.1 |
| Different estimation methods | 11.7 |
| Vintage and Revision differences | 10.9 |
| Different balancing and reconciliation practices | 2.3 |
| Other | 0.1 |

BOP-ROW survey 2017

Source: Eurostat

3.4. Methodological differences — identified issues

BOP-ROW discrepancies due to methodological differences are not to be expected, as the standards postulate full comparability and conceptual consistency of the two statistics. Consequently, differences which were explained by compilers as methodological differences deserve further attention, and require further investigations. At closer look the differences point at different interpretation of the standards by the compilers and reflect the different statistical purposes of the respective statistics. This leads to gaps and omissions as well as different terminology in the manuals from the perspective of the mirror statistics, which supports deviating interpretations of the concepts.

The identified issues concern among others:

- the treatment of household acquisitions abroad (involving the concepts of tourism/travel and the application of thresholds, as well as conflicting consistency requirements with the Input-Output tables);
- the measurement of intellectual property rights (in the context of transactions by IP Boxes with the rest of the world);
- the consistent recording of super- and interim-dividends (inflows and outflows);
- a common definition of SPEs (currently only based on a list of characteristics);
- the consistent estimation of reinvested earnings in general and related to SPEs in specific; and
- the consistent treatment of EU structural funds in the respective accounts of the Member States.

²⁹ Acquisitions less disposals of nonproduced assets (NP)

Recent attention of the European institutions has been focusing on discrepancies in the goods and services accounts. As mentioned above, a dedicated CMFB task force has made specific recommendations on how to overcome these discrepancies, by introducing a short-term and a long-term view. Methodological differences were identified in the context of selected thematic issues – e.g. CIF-FOB adjustments, illegal trade, merchanting, processing and repair, transit trade, goods acquired by tourists or business travellers, government goods and services, package tour expenditure, FISIM, insurance and pension services, the treatment of SPEs, etc. The task force recommendations separated methodological differences and/or interpretations of the statistical manuals from coordination issues and institutional arrangements, and emphasised the need for common interpretations of the manuals in this context. In order to support methodological consistency the international organisations are asked to ensure full consistency of the BPM and SNA (not only ESA) by introducing more concise and common terminology and limiting risks for different interpretations. The current investigations of the CMFB task force are ongoing and subsequently focus on the nature of discrepancies in other component accounts of both statistics with further specific recommendations to be expected by January 2018³⁰.

30 CMFB Task Force on consistency between NA and BOP, Phase 2 covering discrepancies in the financial account and the primary income.

4

Conclusions

When looking at the discrepancies in the non-financial accounts in combination with the available results from the recent compiler survey, one can conclude that:

1. BOP-ROW inconsistencies are still visible in all EU-28 Member States, in particular for services, primary income and (more recently) goods. These are mainly the results from different compilation processes, the use of different data sources or different readings applied to the methodological standards.

2. A group of 6 Member States appears particularly affected by this problem (France, Belgium, Greece, Luxembourg, the Netherlands and Portugal), although the identified causes effectively also apply to other Member States. It is emphasised that improvements in these 6 countries would significantly impact the overall consistency of both statistical domains in the EU-28. Any forward-looking strategy in the EU must imperatively include those mentioned Member States. The nature of the inconsistencies in these 6 Member States is however very heterogeneous and applies to different components of the accounts and different methodological issues. As a consequence, quality strategies must be adapted to a country-specific context, incorporating also structural causes which compilers are facing in these countries. However, in all mentioned Member States considerable revision work is envisaged during the oncoming years, which points at significant improvements to be expected in the statistics of the major contributors.

3. The lack of national coordination and rigid institutional autonomies can be seen as a structural issue behind the occurrence of inconsistent BOP and NA statistics in the EU. Member States with integrated production processes or a high degree of coordinated production processes between national counterparts as a general rule will find it therefore easier to achieve full consistency. On the other hand no “quick fixes” can be expected when no such arrangements prevail.

4. Although consistency between BOP and NA has seen encouraging developments in quarterly statistics since the introduction of BPM6, ongoing revision work could only to a smaller extent succeed in eliminating discrepancies. Revisions alone were not the appropriate measure to neutralise the structural issues behind the problem. However, compilers have become more conscious about the need to improve consistency by subsequently increasing the levels of coordination and emphasise in this context the impact of the oncoming national benchmark revisions (2018-21) to significantly reduce inconsistencies between the two statistics.

5. The following issues appear in the above country-specific context most relevant:

- the extensively large discrepancies due to revision and vintage effects in French statistics³¹;
- the separate data collection frameworks applying to primary income of non-financial corporations in the Netherlands (to be integrated by 2019)³²;

³¹ According to the French compiler the next benchmark revisions will clearly show more consistent statistics, eliminating these effects.

³² While the sharing of micro data is already now common practice among Statistics Netherlands and the Dutch Central Bank.

- the differences in compiling merchanting (goods), and the lack of sharing/coordination of (micro) data sources in order to compile services components in Luxembourg (largely to be coordinated by 2020);
- the systematic reclassifications from services to goods (and vice versa) in Greece and Portugal and the dilemma of conflicting consistency requirements of the National Accounts with the Input-Output tables, which obliges compilers to set priorities;
- the different balancing and reconciliation practices in the Belgium goods account, and methodological differences in its primary income account (e.g. treatment of super-and interim dividends)³³.

6. The use of different data sources is, apart from vintage and revision differences, the most important explanation for discrepancies in the EU-28 Member States. It could be based on a lack of (micro) data sharing among national counterparts due to institutional autonomy regimes prevailing, and applies generally to all components/accounts. But basically it is related to the fact that the data models and survey designs are adapted to the finality of the data set, also taking into account the minimisation of the reporting burden on respondents³⁴. Additionally it is linked to different frequencies of data sources (monthly/quarterly versus annual). Both issues have also an indirect impact in the national revision calendars of both statistics.

7. Methodological issues appear to explain only a small part of the discrepancies in the non-financial accounts, and thus cannot entirely be blamed for the current state of inconsistency in some countries. According to the standards these differences should be negligible. Evidence from the survey and recent international investigations on discrepancies in the goods and services accounts have shown however that the use of different terminologies, and omissions or gaps due to different statistical purposes have fostered different interpretations of the standards by the respective compiler community. In this context some of the discrepancies classified by the survey in other categories are likely related to methodological issues (e.g. different estimation methods, different coverage, reclassification from goods to services). The survey helped however to identify selected issues which are currently followed-up with the concerned compilers.

Outlook

The Eurostat survey on discrepancies between BOP and NA in the non-financial accounts is conducted biannually. A follow-up exercise is currently scheduled for 2019. Meanwhile Eurostat monitors the extent of discrepancies in the non-financial accounts on a quarterly basis at the occasion of the new data releases in both statistics. Results are concurrently published on the Eurostat website³⁵. This monitoring process will also gauge the effects of the aforementioned national benchmark revisions to the state of consistency. Many EU Member States envisage more coordinated compilation practices on the occasion of the oncoming national benchmark revisions (2019-21), which are expected to change the picture during this period significantly.

In the context of better understanding the nature of discrepancies in the financial accounts, the CMFB is currently investigating by a dedicated task force in methodological issues, including recommendations to overcome them.

³³ The Belgian compiler has signalled concrete steps forward towards a coordinated approach in its primary income statistics.

³⁴ In France a data sharing agreement between the central bank and the statistical office ensure the appropriate integration levels already.

³⁵ http://ec.europa.eu/eurostat/statistics-explained/index.php/Consistency_between_national_accounts_and_balance_of_payments_statistics

References

Eurostat Working Paper (2016) – Consistency between National Accounts and Balance of Payments Statistics, Luxembourg

Eurostat (2016a) – Balance of Payments Vademecum, Luxembourg

Eurostat (2013) – European System of Accounts (ESA2010), Luxembourg

IMF (2009) – Balance of Payments and International Investment Position Manual, 6th edition (BPM6), Washington D.C.

Obrzut (2016) – Consistency between national accounts and balance of payments statistics, in: EURONA, Nr. 1/2016, Luxembourg

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Annex

The annex tables show detailed results of the BOP-ROW survey for the 2015-vintage. This is the most recent vintage of the observation period which has been subject to significant revision work. Through this we also can exclude the implicit incorporation of historical issues, potentially applying to earlier periods.

Table A1: Explained discrepancies in goods, 2015
(million EUR)

| Total discrepancies (goods) | 68 493 |
|--|---------------|
| Vintage and Revision differences | 25 435 |
| Different balancing and reconciliation practices | 21 678 |
| Reclassifications from services to goods | 4 945 |
| Reclassification from services to goods | 4 934 |
| Merchanting | 4 836 |
| Reclassification from goods to services | 2 477 |
| Different interpretation of standards | 1 869 |
| Different estimation methods | 1 249 |
| Unexplained | 1 037 |
| Noncoverage of illegal activities | 33 |
| Rounding | 1 |

BOP-ROW survey 2017

Source: Eurostat

Table A2: Explained discrepancies in services, 2015
(million EUR)

| Total discrepancies (services) | 140 963 |
|--|----------------|
| Vintage and Revision differences | 25 680 |
| Different data sources | 22 966 |
| Methodological differences | 11 166 |
| Different balancing and reconciliation practices | 7 701 |
| Different estimation methods | 4 945 |
| Reclassifications from services to goods | 4 934 |
| Reclassification from services to goods | 2 402 |
| Reclassification from goods to services | 447 |
| Error identified in BOP | 432 |
| Unexplained | 280 |
| Different compilation practices | 79 |
| Noncoverage of direct insurance in NA | 1 |
| Rounding | 0 |

BOP-ROW survey 2017

Source: Eurostat

Table A3: Explained discrepancies in primary income, 2015
(million EUR)

| Total discrepancies (primary income) | 118 483 |
|---|----------------|
| Vintage and Revision differences | 67 453 |
| Different data sources | 32 001 |
| Different estimation methods | 8 396 |
| Methodological differences | 7 562 |
| Compilation error | 1 498 |
| Different interpretation of standards | 774 |
| Different compilation practices | 435 |
| Different estimation practices | 184 |
| Different coverage: Rents | 125 |
| Unexplained | 37 |
| Accrual recording in NA for Subsidies | 19 |

BOP-ROW survey 2017

Source: Eurostat

Table A4: Explained discrepancies in secondary income, 2015
(million EUR)

| Total discrepancies (secondary income) | 83 598 |
|--|---------------|
| Different data sources | 34 287 |
| Unexplained | 30 609 |
| Methodological differences | 7 123 |
| Vintage and Revision differences | 3 801 |
| Different estimation methods | 2 846 |
| Error identified in ROW | 2 238 |
| Different data sources | 1 418 |
| Different coverage | 706 |
| Different balancing and reconciliation practices | 230 |
| Different compilation practices | 184 |
| Different interpretation of standards | 126 |
| Error identified in BOP | 20 |
| Omissions | 10 |

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Source: Eurostat

Table A5: Explained discrepancies in the capital account, 2015
(million EUR)

| Total discrepancies (capital account) | 9 776 |
|--|--------------|
| Different data sources | 3 963 |
| Vintage and Revision differences | 2 523 |
| Methodological differences | 1 969 |
| Different estimation methods | 1 312 |
| Different coverage | 6 |
| Different balancing and reconciliation practices | 2 |
| Unexplained | 1 |

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Source: Eurostat

Table A6: Methodological differences by country, 2015
(million EUR)

| BOP item | 39 620 |
|------------------|---------------|
| Goods | 0 |
| Services | 22 966 |
| Luxembourg | 19 480 |
| Portugal | 1 715 |
| Poland | 1 685 |
| Italy | 86 |
| Primary income | 7 562 |
| Poland | 3 971 |
| Romania | 1 367 |
| Belgium | 951 |
| Portugal | 751 |
| Czech Republic | 314 |
| Italy | 112 |
| Malta | 96 |
| Secondary income | 7 123 |
| Poland | 4 748 |
| France | 1 272 |
| Czech Republic | 553 |
| Romania | 290 |
| Portugal | 260 |
| Capital account | 1 969 |
| Poland | 1 969 |

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Source: Eurostat

Table A7: Largest absolute discrepancies, 2015
(million EUR)

| BOP item | Country | Reason | Discrepancy |
|-------------------------|----------------|--|--------------------|
| Goods | | | |
| | Belgium | Different balancing and reconciliation practices | 20 195 |
| | France | Vintage and revision differences | 20 195 |
| | Portugal | Reclassification from services to goods | 4 945 |
| | Greece | Reclassification from services to goods | 4 094 |
| | Luxembourg | Merchanting | 4 090 |
| Services | | | |
| | France | Vintage and revision differences | 52 370 |
| | Luxembourg | Different data sources | 25 680 |
| | Luxembourg | Methodological differences | 19 480 |
| | Luxembourg | Different balancing and reconciliation practices | 9 361 |
| | Portugal | Reclassification from services to goods | 4 945 |
| | Denmark | Different estimation methods | 4 290 |
| | Greece | Reclassification from services to goods | 4 094 |
| Primary income | | | |
| | Netherlands | Vintage and revision differences | 45 479 |
| | Netherlands | Different data sources | 25 789 |
| | France | Vintage and revision differences | 12 109 |
| | France | Different data sources | 5 196 |
| | Poland | Methodological differences | 3 971 |
| | Greece | Different estimation methods | 3 246 |
| | Germany | Vintage and revision differences | 3 137 |
| Secondary income | | | |
| | Germany | Different data sources | 25 161 |
| | France | Different data sources | 4 909 |
| | Poland | Methodological differences | 4 748 |
| | Belgium | Different data sources | 2 348 |
| | Netherlands | Error identified in NA | 2 238 |
| | Spain | Different estimation methods | 2 083 |
| Capital account | | | |
| | France | Different data sources | 2 189 |
| | Poland | Methodological differences | 1 969 |
| | Germany | Different data sources | 1 619 |

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Source: Eurostat

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Consistency between national accounts and balance of payment statistics — an updated view on the non-financial accounts

In the light of full consistency of methodological standards in national accounts and balance of payments statistics an assessment of the consistency between the two appears justified. This paper presents the results of a recent study of consistency between the quarterly sector accounts and quarterly balance of payments statistics and elaborates on the underlying reasons for the observed discrepancies.

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