# 1 On the question of a new interpretation of balance of payments statistics

## Introduction

The balance of payments is commonly understood as a mirror of the economy. It represents transactions of a country's residents with non-residents, carried out during a given period. Balance of payments data is a very important source of information on a country's financial relations with foreign countries, especially in terms of external balance (imbalance). The balance also provides data on outflows and inflows of foreign currency recorded by different components of the BOP and on interactions between them. Information contained in those records is of particular importance to a central bank in the context of a current monetary policy as well as to the government administration, because it reflects the impact of an external environment on the development of the economy.

Balance of payments data is also used by international institutions. The European System of Central Banks uses balance of payments statistics in tasks related to the development and implementation of a single monetary policy, foreign currency operations and maintaining an optimal level of official reserve assets. Likewise, the European Commission relies on balance of payments data in the "Alert Mechanism Report", the procedure of evaluating macroeconomic imbalances that was introduced in the aftermath of the crisis that affected countries of the European Community in 2008. The ratio of the current account balance to GDP, calculated as the average of three years, is one of the most important indicators of a country's external balance (imbalance) as well as its competitiveness, also tested in this procedure.[1]

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[1] *European Economy*, "Occasional Papers" 2012, No. 92, February, Brussels, http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp92_en.pdf (accessed 5.07.2015).

In most countries, balances of payments are prepared according to the methodology of the IMF, which makes it possible to compare them. These compilations are regularly and widely published, for example by national central banks and the International Monetary Fund in the Balance of Payments Yearbook.

Due to the importance of balance of payments statistics to many of the above-mentioned users, both domestic and international, and the ongoing transformation of national economies and the world economy, once in a while the IMF proposes amendments to the methodology of the balance of payments in order to increase the international comparability of the data and to adapt the methodology to changes in the global economy. The latest methodology is included in the sixth edition of the Balance of Payments Manual (BPM6) published by the International Monetary Fund in 2009.[2] It replaced the previous fifth edition of the Balance of Payments Manual (BPM5), which was issued in 1993.

The standards specified in the balance of payments manual are consistent with the principles included in the System of National Accounts 2008 (SNA 2008), the European System of Accounts 2010 (ESA 2010) and the fourth edition of the OECD Benchmark Definition of Foreign Direct Investment Manual.

The aim of this article is to present the most important changes introduced to the methodology of balance of payments statistics. Specifically, this study attempts to answer the following research question: what are the differences between various components and parts (categories) of the Polish balances of payments calculated according to the previous and current Balance of Payments Manual? The answer was obtained using the following methods. The theoretical part involved analysis of the changes implemented by the BPM6 manual. The scope of changes in each category of the balance of payments was assessed using the method of comparative analysis and selected methods of descriptive statistics. The study was based on a secondary data acquired from the National Bank of Poland (NBP).

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[2] *Balance of Payments and International Investment Position Manual. Sixth Edition BPM6*, IMF, 2009, www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf (accessed 5.07. 2015).

In the research procedure, it was necessary to select a period that would allow for analysing the scope of differences between the individual items in the balance of payments, which resulted exclusively from the changes in the method. The annual data compiled according to the old methodology has been published by the NBP until 2013. On the other hand, the data compiled by the new standards has been available from 2004 until today. Analysis of the differences was thus possible only in the period of 2004–2013. Therefore, the year 2013 was selected as a study period, as it was the last period for which the data compiled according to both manuals, the old and the new one, was available.

## 1. Reasons for introducing amendments to the previous balance of payments statistics

The necessity of updating the requirements of the previously used methodology for collecting balance of payments statistics resulted primarily from the need to adapt it to changes in the global economy caused by the development of globalization. The new manual takes into account the effects of increasing globalization, such as:[3]

- currency unions,
- an increase in cross-border production processes,
- emergence of multinational companies with complex structure,
- an increase in money transfers made by immigrants, associated with the increasing mobility of workers,
- changes in international financial markets resulting from the development of new financial instruments (e.g., financial derivatives, securitization)
- creation of special purpose vehicles.[4]

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[3] *Ibidem*, pp. 4–5.

[4] Special purpose vehicles are legal entities involved in the transfer of capital and conducting financial activity for other companies from their capital group. These entities are usually involved in holding activities as well as raising capital in the name and on behalf of other members of the group. Cf. *Bilans płatniczy Rzeczpospolitej Polskiej za IV kw. 2012 r.,* NBP Warszawa 2013, p. 39, www.nbp.pl (accessed 15.07.2015).

Another important reason for updating the IMF's methodology was growing interest of the abovementioned users, in the use of balance of payments statistics to assess a country's vulnerability to various disturbances in the financial market.[5]

## 2. Scope of changes

The new BPM6 manual introduced amendments to balance of payments statistics in terms of methodology, nomenclature and sign convention.

### Changes in the goods and services account

According to the new methodology, trade in goods records only these transactions which transfer the economic ownership of goods from residents to non-residents and vice versa. The transfer of ownership used here as the basis of the balance of payments means that the values of goods sent abroad for processing or received in a country after processing are not recorded as imports or exports of goods (as in the BPM5). Furthermore, a processing fee is understood as an export or import of processing services, which concern goods owned by third parties. As a result, the value of exports and imports of goods decreases, and the value of exports and imports of services increases. According to the BPM6, similar amendments concern repairs on goods.

Another change in trade in goods concerns recording merchanting activity. In the BPM5, it was classified as "services." According to the new methodology, it is recorded in the goods account. Difference between sales and purchases of goods under merchanting is listed as "net exports of goods under merchanting". This entry includes merchant's"

[5] R. Heath, R. Dippelsman, *Balance of Payments and International Investment Position Manual (BPM6)*, IMF, Statistics Department, p. 2, http://ec.europa.eu/eurostat/statistics%ADexplained/index.php?title=Balance_of_payments_and_international_investment_position_manual_ (accessed 30.06.2015).

mark-ups, gains and losses on financial assets/liabilities and changes in inventories of goods under merchanting.[6]

With regard to trade in services, one of its items, financial services, has been extended to include financial intermediation services indirectly measured (FISIM). FISIM are financial services in which brokers do not charge fees and commissions in an open and direct way, hiding all sorts of charges. FISIM represent a difference between the reference rate (at which both lender and borrower would like to conclude the transaction) and interest rates received from borrowers as well as interest rates paid to depositors.[7] In the current methodology, service charges are included in financial intermediation services indirectly measured, but only in the case of loans and deposits that are given or accepted by financial institutions. In the BPM5, FISIM were not recorded separately, but were entered as the part of the interest and were thus included in the income account instead of "services."[8]

The BPM6 manual has extended the range of data on cross-border insurance services and pension services. Their value and date of registration are now better adjusted to the actual protection granted by an insurance contract.

## Changes in the income and current transfers accounts

The new manual has replaced the category "income" with "primary income." As before, it mainly records costs related to the compensation of employees (who have stayed abroad for less than one year) and income from foreign investment (direct, portfolio and other). In addition, "primary income" now includes some of the entries that were previously

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[6] Guideline of the ECB of 9 December 2011 on the statistical reporting requirements of the ECB in the field of external statistics (ECB/2011/23), OJ L 65, www.ecb.europa.eu/ecb/legal/pdf/l_06520120303p00010044.pdf (accessed 10.07.2015).

[7] *Bilans płatniczy – nowe standardy statystyczne (BPM6)*, NBP, Warszawa 2014, p. 8, www.nbp.pl/aktualnosci/wiadomosci_2014/bilans_platniczy_%E2%80%93_nowe_standardy_statystyczne_2014_09_30.pdf (accessed 4.07.2015).

[8] *Informacja o zmianach w statystyce bilansu płatniczego i międzynarodowej pozycji inwestycyjnej w 2014 roku*, NBP, Warszawa 2014, p. 3, www.nbp.pl/aktualnosci/wiadomosci_2014/info-bop-iip.pdf (accessed 10.07.2015).

recorded by the BPM5 as current transfers, specifically, taxes and subsidies on products and production as well as rents. According to the current methodology, they are recorded as "other primary income."[9] Moreover, investment income attributable to the owners of investment fund shares includes not only dividends that are paid to unitholders, but also reinvested earnings.[10]

The component "secondary income" in the BPM6 corresponds to the previous "current transfers" specified by the BPM5. The "secondary income" contains a broader category of "personal transfers" which records not only the remittances of workers who work more than one year, but all current transfers in cash or in kind between households of residents and non-residents.[11] The terms "primary income" and "secondary income" are consistent with the system of national accounts.

### Changes in the financial account

The most significant change in the financial account was introduced to the "direct investments" item. In the BPM5, it was divided into foreign direct investment in Poland and Polish direct investment abroad. The balance of foreign direct investment in Poland was equal to the difference between the commitments to direct investors (liabilities) and receivables from parent entities (assets). The balance of Polish direct investment abroad was calculated as the value of receivables of Polish investors abroad (foreign assets) subtracted by liabilities of Polish investors to subsidiaries (foreign liabilities). Under the new methodology, foreign direct investment includes assets and liabilities that are recorded separately, just like other forms of capital flows.

### Changes in sign convention

Changes in sign convention introduced by the new BPM6 manual is consistent with the SNA 2008 and ESA 2010. According to the latest

[9] *Bilans płatniczy – nowe standardy...*, p. 10.
[10] *Balance of Payments...*, p. 298.
[11] *Ibidem*, p. 299.

methodology, in the financial account, the positive sign "+" indicates an increase in foreign assets and liabilities, while the negative sign "–" represents their decrease. In the case of BPM5, the signs "+" and "–" were interpreted vice versa, but liabilities were presented in the same way as in BPM6. Thus, the change in sign convention concerns only foreign assets recorded in the financial account.

The balance on the financial account is calculated as the value of national entities" investments abroad minus the investments of non-residents in a country. According to the BPM6, the positive balance of the financial account represents the net capital outflow from a country, while in the BPM5, on the contrary, a positive balance meant capital inflow. The changes in sign convention in the financial account are shown in Table 1.

Table 1

Change in sign convention in the financial account and reserve assets

| | | Financial account and reserve assets according to BPM5 | Financial account and reserve assets according to BPM6 |
|---|---|---|---|
| Assets | Capital outflow = Increase in assets | – | + |
| | Capital inflow = Decrease in assets | + | – |
| Liabilities | Capital inflow = Increase in liabilities | + | + |
| | Capital outflow = Decrease in liabilities | – | – |

Source: *Informacja o zmianach…*, p. 5.

## 3. Impact of the new methodology on the Polish balance of payments in 2013

The following analysis concerns only the changes observed in the individual entries in the balance of payments resulting from the introduction of the new methodology. Neither changes in time nor a cause-and-effect relationship were analysed. The data in Table 2 shows that in 2013 the current account balance calculated according to the BPM6 was negative and stood at 5,148 million Euro. The same indicator under the old manual was also negative, but 3.5% higher (5,328 million Euro). Differences in the balance due to the changes in methodology were thus insignificant.

The new methodology, however, resulted in significant changes in balances of various items of the current account.

The new standards had a significant effect on the goods account, which was nearly 3.7 times lower than in the old methodology of the BOP, amounting to 635 million Euro as compared to 2,309 million Euro recorded previously. This should be explained as a result of the above-mentioned reclassification of trade in goods undergoing processing and repairs. The new method of data compilation led to the increase of a surplus of trade in services. At the end of the study period it amounted to as much as 7,910 million Euro, which was 50% higher compared with the BOP under the BPM5. The positive balance on trade in goods undergoing processing reached over 2.3 billion Euro, while repair services stood at 185 million Euro.

Table 2

The Polish balance of payments in 2013 (in million Euro)

| | 2013 BPM5 | | 2013 BPM6 |
|---|---|---|---|
| Current account balance | –5,328 | Current account balance | –5,148 |
| Balance on trade in goods | 2,309 | Balance on trade in goods | 635 |
| Balance on trade in services | 5,249 | Balance on trade in services | 7,910 |
| Income balance | –16,721 | Balance on primary income | –13,266 |
| Current transfers balance | 3,835 | Balance on secondary income | –427 |
| Capital account balance | 9,011 | Capital account balance | 9,006 |
| Financial account balance | 3,256 | Financial account balance | –7,266 |
| Polish direct investment abroad | 3,671 | Direct investment – assets | –2,071 |
| Foreign direct investment in Poland | –3,859 | Direct investment – liabilities | 2,432 |
| Portfolio investment – assets | –1,663 | Portfolio investment – assets | 1,650 |
| Portfolio investment – liabilities | 1,969 | Portfolio investment – liabilities | 1,751 |
| Other investment – assets | –43 | Other investment – assets | 260 |
| Other investment – liabilities | 2,798 | Other investment – liabilities | 3,141 |
| Financial derivatives | 383 | Financial derivatives | –535 |
| | | Official reserve assets | 754 |
| Net errors and omissions | –6,183 | Net errors and omissions | –11,124 |
| Official reserve assets | –756 | | |

Source: www.nbp.pl (accessed 2.07.2015).

Calculations based on the BPM6 still showed a high deficit in primary income, which in the studied year was equal to 13,266 million Euro. However, it was nearly 3.5 billion Euro (20.7%) lower compared with "income balance", the corresponding component in the BPM5. This is a consequence of, i.a., emergence of the new category "other primary income" contained in primary income account, recording rents as well as taxes and subsidies on production and products which, in the previous methodology, were included in current transfers. The balance of this component amounted to approximately 4.5 billion Euro.[12]

In comparison with the data compiled according the BPM5, a major change in secondary income was recorded. The previous current transfers balance was positive and reached as much as 3,835 million Euro, whereas the corresponding "secondary income" balance in the BPM6 was negative and amounted to minus 427 million Euro. This should be explained as a result of relocation of some items recorded in the current transfers account under the BPM5 (such as aforementioned taxes on imports, subsidies, grants and rents) to the "primary income" account specified by the BPM6, as well as supplementing secondary income with statistics on taxes on income and profits and on capital gains. Moreover, there have been corrections of data on the remittance of short-term workers who are non-residents living in Poland and funds transferred abroad by entities operating in Poland in the long term.[13] The impact of the new regulations on the decrease in secondary income balance is difficult to examine in detail because the NBP does not publish relevant statistics on this subject.

Furthermore, in 2013, a positive balance was recorded on the capital account, which amounted to 9,006 million Euro. The latest manual has not introduced any significant changes to this category, therefore, no significant differences in terms of value were observed in this balance

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[12] Unless otherwise noted, the additional data which is not included in Table 2 has been acquired from www.nbp.pl (accessed 2.07.2015).

[13] *Informacja o zmianach*..., p. 3 (accessed 10.07.2015).

compared with calculations under the BPM5. Transfers of EU funds were the main source of this surplus.

Another section of the Polish balance of payments, the financial account, recorded a negative balance of 7,266 million Euro, which according to the new sign convention specified in the BPM6 represented the value of foreign capital inflow to Poland. It was 2.2 times higher than according to the previous methodology. It should be noted that the financial account balance calculated according to the BPM6 included (in contrast to the previous standards) the increase of official reserve assets equal to 754 million Euro. If this entry was not included in the financial account balance in this period, the value of a surplus on the financial account would amount to 8,020 million Euro, which is 2.5 times higher than under the previous methodology.

With regard to the structure of foreign capital inflow, the biggest difference resulting from the introduction of the BPM6 standards was recorded in direct investment. In 2013, the balance of foreign direct investment assets stood at minus 2,071 million Euro, which according to the new sign convention represents a decline in direct investment abroad made by Polish entities and a return of this form of capital to the country. In the same year, foreign investors transferred 2,432 million Euro to Poland as foreign direct investment. Therefore, in total, the Polish economy attracted more than 4.5 billion Euro under this category. According to the BPM5, the outflow of capital in a form of FDI from Poland amounted to 188 million Euro in this period. This was caused, on the one hand, by the withdrawal of nonresidents from direct investment in Poland whose value was estimated at 3,859 million euros, on the other hand, by the return of Polish direct investment from abroad which accounted for 3,671 million Euro.

No such significant differences resulting from the introduction of the new methodology were observed in the remaining components of the financial account. The Polish portfolio investment abroad assessed according to both the old and new standards showed an outflow of capital abroad with comparable values. The difference between them accounted for less than 1%. Foreign portfolio investment in Poland recorded no significant changes as well, but in this case the difference reached 12%.

With regard to other forms of investment from both residents and non-residents as well as financial derivatives, the direction of changes was similar, i.e, the inflow of capital was observed. The difference in the balance on other investment calculated according to both methodologies amounted to 126 million Euro. The difference between the balances of derivative financial instruments reached 152 million Euro.

In 2013, the net errors and omissions was relatively high; according to the BPM6, it amounted to over 11 billion Euro, which was nearly two times higher than under the BPM5 (6,183 million Euro). Such a large difference observed in this component indicates the poor quality of the statistical data used for compilation of the balance of payments, which leads to difficulties in the proper assessment of the Polish balance of payments. Improved verification of data on both the current and financial account would certainly result in the correction of the current account balance, leading to an increase in the deficit.

From the accounting perspective, the sum of the basic components of the balance of payments should equal zero. According to the calculations based on the BPM5, the surpluses recorded on the financial and capital accounts amounted to, respectively 9,011 million and 3,258 million Euro, which allowed to finance not only the current account deficit (5,328 million Euro), but also the negative net errors and omissions equal to 6,183 million Euro and an increase in foreign exchange reserves of 756 million Euro. A total of the abovementioned main components of the balance of payments gives the following result:

$$-5{,}328 + 9{,}011 + 356 - 6{,}183 - 756 = 0.$$

A similar compilation of the balances observed in the study period may be created according to the new manual. Under the BPM6, the surpluses in the capital and financial accounts amounted to, respectively, 9,006 million Euro and 7,266 million Euro, which allowed to finance the current account deficit of 5,148 million Euro and the negative net errors and omissions equal to 11,124 million Euro. In agreement with the accounting principles we obtain the following result:

$$-5{,}148 + 9{,}006 - 7{,}266 - 11{,}124 = 0.$$

In economic terms, the equilibrium of the balance of payments is understood as a situation in which the sum of the current account balance and long-term capital and financial flows is equal to zero (i.e., the transactions on the current account are not compensated by short-term capital flow or change in official reserve assets).[14] Such an approach to equilibrium is at present difficult to apply in practice, because there is a part of capital flows which cannot be unambiguously assigned to either long- or short-term transactions (the NBP does not publish the data classified in this manner anymore). Moreover, as it was already mentioned, the large net errors and omissions hinders the assessment of the actual value of the current account balance in the Polish balance of payments and ways to finance it.

It should also be remembered, that the relationship between the current account balance and capital and financial accounts depends on the exchange-rate regime. In the case of a floating exchange rate, which is applied in Poland, the central bank is not obliged to carry out transactions by means of official foreign exchange reserves in order to stabilize the balance of payments. In practice, however, a change in official reserve assets of the NBP does take place, mostly as a result of transactions processed on behalf of clients of the NBP (mainly the Ministry of Finance).[15]

In the economic sense, the state of the balance of payments is presently assessed based on the balances of its individual components, as well as on of the indicators created from data included in the balance of payments (usually in relation to GDP). The main indicator for evaluation of external balance is the value of the current account balance relative to GDP, which should remain within the range of –4% to 6%.[16] With regard to the value of this indicator in 2013, the deficit on the current account stood at minus 1.3% of GDP, which is 2.7% below the specified

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[14] J. Świerkocki, *Zarys ekonomii międzynarodowej*, PWE, Warszawa 2011, p. 75.

[15] *Bilans płatniczy Rzeczpospolitej Polskiej za IV kw. 2014 r.*, NBP, Warszawa 2014, p. 38, www.nbp.pl (accessed 10.07.2015).

[16] Threshold values were set by EC in a procedure of evaluating of macroeconomic imbalances, introduced in the aftermath of the latest international financial crisis. Cf.. *European Economy...*

threshold. According to experts from the NBP, assessment of the external imbalance of the Polish economy should take into account the sum of balances of current and capital accounts in relation to GDP, not just the current account balance to GDP, due to the fact that the capital account includes to a large extent capital transfers from the EU budget, aimed at financing infrastructure investment.[17] In 2013, the sum of the balances on current and capital accounts gave a surplus of 3,858 million Euro, which represented 1% of GDP. This indicates that in 2013 the Polish economy was characterized by a lack of borrowing needs, which would have to be financed by the inflow of foreign capital.

## Summary

The analysis conducted in this study shows that:

1. The most significant changes introduced by the new edition of the Balance of Payments Manual (BPM6) concern the methodology for collecting data on:
   - goods (exclusion of goods undergoing processing and repair),
   - services (exclusion of merchanting and extending insurance and pension services),
   - income (divided into primary and secondary income),
   - direct investment (reclassified as assets and liabilities in order to adapt data presentation to other entries of the financial account).
2. Compared with the old manual (BPM5), the introduced changes did not result in significant differences in the current account balance (in spite of considerable reclassifications and revaluations of its components), the capital account or official reserve assets.
3. The largest differences were observed in the balance on the financial account (particularly with regard to foreign direct investment) and net errors and omissions.
4. Nearly two-fold increase in net errors and omissions compared to the old methodology makes it difficult to properly assess the state of the

[17] *Bilans płatniczy Rzeczpospolitej Polskiej za IV kw. 2013 r.,* NBP Warszawa 2014 , p. 11, www.nbp.pl (accessed 10.07.2015).

Polish balance of payments, which determines the external balance and macroeconomic stability of the country.

5. The NBP should thus continue to work on improving the data, both in current and finance accounts statistics, in order to eliminate the causes of their poor quality.

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