



IFC - Central Bank of Armenia Workshop on "*External Sector Statistics*"

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## Accountancy records of companies and reporting for the external statistics needs<sup>1</sup>

Jacek Kocerka and Marcin Dwórzniak,

Narodowy Bank Polski

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<sup>1</sup> This paper was prepared for the meeting. The views expressed are those of the authors and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

# Accountancy records of companies and reporting for the external statistics needs

Jacek Kocerka, Marcin Dwórzniak

## Abstract

The article shows that with the use of information stored in accounting systems of companies, it is possible to obtain reliable data for the needs of balance of payments statistics. Narodowy Bank Polski's experience in designing a reporting system where special attention is paid to the cases where economic operations are recognized for accounting needs differently than it is required in external statistics is shown. Authors use leasing, results from operating activities, Current Operating Performance Concept and valuation of business entities as examples of areas that require special attention due to inconsistencies between statistical requirements and accounting framework. The article also proves that the structure of the reporting system based on data obtained from the accounting system can help central bank to get good quality data defined, among others, in the ESCB Public Commitment on European Statistics.

Keywords: accounting systems, leasing, results from operating activities, Current Operating Performance Concept, valuation of business entities, quality criteria

JEL classification: M41 (Accounting), C82 (Methodology for Collecting, Estimating, and Organizing Macroeconomic Data; Data Access)

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## 1. Introduction

The article raises the subject of collecting data necessary for the compilation of the balance of payments and international investment position statistics. It may be assumed that data which may be used in balance of payments compilation can be derived from accounting records of economic entities. In this context, it is important that the reporting system is understandable for reporting entities. Receiving data directly from accounting systems of entities should enable better adjustment to the country's balance of payments requirements.

Data derived directly from the accounting systems of business entities should be in our opinion more accurate.

## 2. Accounting systems of business entities and the balance of payments

Data necessary for compilation of the balance of payments and the international investment position may be obtained, among others, from accounting records kept by business entities. It is important that the collected data make possible to distinguish between assets and liabilities (sources of financing of assets), broken down into those related to residents and non-residents. According to the guidelines set up by the Manual of Balance of Payments Statistics and International Investment Position (IMF 2009), the essence of the creation of a business operation is the change in its result of "economic ownership" of the subject of the transaction.

In order to facilitate the reporting process, the main focus of reporting forms should be the division of data into assets and liabilities. On the assets side, one can distinguish, just as in the entity's balance sheet: real estate, loans granted, owned shares, trade receivables and deposits as well as investments in securities as well as financial derivatives. Layout of forms on the liabilities side may mirror the layout of assets forms, and contain information on equity (mainly non-resident equity), loans and credits received, trade liabilities as well as liabilities resulting from financial leasing. Figure 1 presents balance sheet positions in which one can find information useful for compilation of the balance of payments statistics.

ASSETS		LIABILITIES	
NON-CURRENT ASSETS (FIXED ASSETS)		EQUITY	Equity
Real estate			
Financial assets		Intangible assets	Share capital
Stocks and shares		Tangible fixed assets	Supplementary capital
		Long-term receivables	Other reserve capitals
		Long-term investments	Net profit (loss)
CURRENT ASSETS		LIABILITIES AND PROVISIONS FOR LIABILITIES	
Trade receivables		Inventories	Provisions for liabilities
Deposits		Short-term receivables	Long-term liabilities
Other assets		Short-term investments	Short-term liabilities
			Credits and loans
			Trade liabilities
			Other liabilities

Figure 1 Typical balance sheet of business entity and information needed to compile b.o.p./i.i.p.

Figure 1 shows the universality of reporting forms used by Narodowy Bank Polski allowing business entities to apply either national (so-called National Generally Accepted Accounting Principles (nGAAP)) or international (the most popular in Europe are the International Accounting Standards (IAS)/International Financial Reporting Standards /IFRS/) accounting and financial reporting standards.

The balance sheet structure is similar in both national and international regulations. Differences in balance sheets prepared on the basis of nGAAP and IFRS are related to organizing of assets and liabilities as well as individual positions. These differences, however, should not have significant influence on the country's balance of payments. Moreover, it is possible to link items in "simplified" balance sheet with individual reporting forms. Therefore, a company which distinguishes assets and liabilities while recording transactions with non-residents may provide data for the purposes of compiling the balance of payments in a more "automatic" manner (i.e. without involving additional resources).

Reporting entities apply national accounting standards as well as (or) international standards, therefore it is important to maintain consistency of definition for each reporting category (see also Yoon 1996). It is worth noticing that the problem of the definitional approach does not occur only at the interface between national and international regulations, but also within national rules on the basis of which business entities keep their accounting records.

The accounting systems may vary depending on whether the entity applies national accounting standards or international accounting standards. Potential differences in the records may result from the manner in which particular business transactions are recognized (including valuation rules) in the accounting system and the method of presentation of assets and liabilities. Our co-operation with entities reporting to Narodowy Bank Polski allowed us to identify three categories in which there may be definitional differences in terms of accounting and balance of payments:

- Leasing
- Gross profit (loss) from current activity/Current Operating Performance Concept (COPC) and
- Valuation of business entities

### 3. Leasing

Leasing is an important example of a concept which is not clearly defined by legal regulations. There are two types of leasing: financial and operational. The main difference between these two is the manner in which the owner (lessor) transfers the leased asset to the lessee. It is assumed that in case of financial leasing together with the possibility to use the leased asset, the lessor transfers to the lessee not only the right to use the leased asset but also all risks associated with its use. This situation is similar to purchase of an asset, and the return of funding is regarded as loan repayment. The same approach should be used for reporting for the needs of balance of payments. In the case of operating leasing, ownership and responsibility for the leased asset (i.e. all risks) remains with the lessor. In balance of payments statistics, operating leasing is treated as a lease agreement, which is simply a type of commercial transaction, and leasing fees are recorded in services account. If it is assumed that the data transferred should be consistent with the accounting records kept under the accounting law at the national level (nGAAP), there should be no doubt about how to classify the lease that the company has. The problem arises when the subject of leasing is classified differently under national and international law. The new international standard for financial reporting – IFRS 16 is currently being implemented. According to the new standard, all leasing contracts should be treated as financial leasing (on the side of the lessee). The reclassification of existing contracts from operating leasing to financial leasing will, in the case of lessees, cause financial account statements to appear in reporting forms instead leasing fees in the current account. In addition, the difference will be visible when two entities have signed identical leasing agreements, content-wise. In the case of one entity keeps records in accordance with national law and classifies leasing as an operating lease, and the other entity keeps records in accordance with international law and classifies leasing as a financial lease. In that situation leasing items will be visible in various items of the balance sheet.

### 4. Gross profit (loss) from current activity/Current Operating Performance Concept (COPC)

The second concept, where the definition is ambiguous in the accounting system is the result on operating activities. In macroeconomic statistics Current Operating Performance Concept should be used (BPM6 11.43). Depending on the entity, it may be equated with the result on sales or result after considering other operating revenues and expenses. In the balance of payments statistics, operating result is understood as the result after taking into account other operating revenues and expenses. In order to calculate gross profit (loss) from current activity the result on operating activities should be adjusted for: gains or losses from the revaluation, any gains or losses arising from valuation changes, such as inventory write-offs, write-downs, or write-ups, realized gains or losses from the disposal of assets, result on extraordinary events. In the case of further calculation of the result (profit/loss) on current operations, the operating result calculated for the purposes of statistics should be further adjusted for financial income on dividends received, net income on interest and the value of retained earnings and losses incurred by direct investment

entities. Figure 2 illustrates the abovementioned methodology of calculating gross profit (loss) from current activity for BOP/IIP purposes.

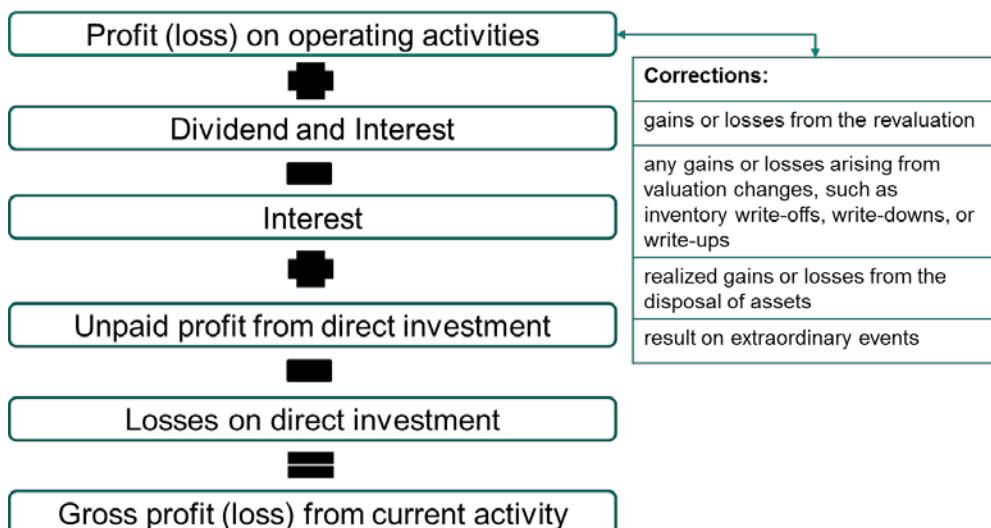


Figure 2 Gross profit (loss) from current activity –calculation for IIP purposes

The second method is to calculate current operating concept (COPC). Definition of COPC earnings consists of income from normal enterprise operations before non-recurring items (such as write-offs) and capital gains and losses are accounted for the earnings of direct investment enterprises reported using the "Current Operating Performance Concept" (COPC) should exclude: any gains or losses arising from valuation changes, such as inventory write-offs, write-downs, or write-ups; gains or losses on plant and equipment from the closure of part or all of a business; writing-off of intangible assets, including goodwill, due to unusual events; writing-off of research and development expenditures capitalised in a prior period; provisions for losses on long-term contracts; exchange rate gains and losses incurred by the direct investment enterprise both from its trading activities and from its holdings of foreign currency assets and liabilities; unrealised gains or losses from the revaluation of fixed assets, investments and liabilities; realised gains or losses made by the enterprise from the disposal of assets or liabilities. It should be noted that until 2005 the definition of COPC had been included in IAS 8 (accounting law). Since then, it can be found only in OECD materials - benchmark definition ("statistical law").

## 5. Valuation of business entities

In the case of providing information on the market valuation of equities (for sale-purchase transactions) and the balance sheet of the economic entity for balance of payments statistics, the problem is determining the moment up to which the market valuation of equities is reliable. This problem has not been explicitly resolved in accounting regulations. In fact, it is stated in the accounting law that the valuation of assets and liabilities should be carried out periodically (mostly at the end of the accounting year). The practice, however, allows to presume that, especially in the case of valuation of equity, the above valuation may have some objections. In line with the

above approach, the entity's value measured on the basis of the market valuation carried out as part of the sale-purchase transaction should be valid until the end of the annual reporting period. After this date, the valuation of the entity based on equity (OFBV) should be considered more reliable.

## 6. Data quality

Reporting system based on data derived directly from the company's accounting system can provide certain level of quality. Quality criteria set out, among others, in Public Commitment to European Statistics by the ESCB, can be used to assess quality of accounting information used in bop/ip context.

Receiving data adapted to the needs of BoP statistics allows for accurate and reliable statistical output. In the Public Commitment on European Statistics it means ESCB statistics must provide accurate and reliable information on the phenomenon that they measure. Harmonized definitions for the needs of BoP and accounting allows to collect specified data. It's also important to emphasize cooperation with reporting entities. Each reporting entity has a dedicated contact person in NBP regional branch who provides explanations on the reporting procedure both in methodological and technical (IT) area. Should there be a methodological problem that cannot be addressed within the contact person's capacity experts from Department of Statistics take over. NBP also organises specialist training sessions tailored for the needs of reporting entities which focus on all aspects related to reporting i.e. legal, technical and methodological. All explanation is given in clear and accessible terms. Usually there are three to five sessions a year, with ca. 100 representatives of reporting entities altogether. Meetings with reporting entities not only allow NBP to provide guidelines to business entities but also give the NBP staff an opportunity understand the needs of entities involved in operations with abroad. During training sessions, reporting entities are instructed on legal regulations in which the reporting requirement is stipulated and are given detailed explanations illustrated with real-life examples e.g. on links between different reporting forms. There is also consulting process established when change in reporting regulation is expected.

Direct contact with data providers allows for verification of data. Data can be verified either through receiving additional explanations and/or direct access to the company's accounting system. It helps to have accuracy and reliability (stability) of the statistical output.

Data derived from accounting systems of companies which are under obligation to comply the basic accounting principles, allows NBP to fulfil the consistency and comparability of the statistical output criterion. Companies should also pay attention to keeping data presented between reporting periods consistent and comparable.

Data in accounting systems should be recorded on an ongoing basis (which is in line with one of the basic accounting principles) which should allow for timeliness (and punctuality) of the statistical output. All described actions allow NBP to get response rate of 98% for monthly reports and 96% for quarterly ones.

One of the quality criterions is also cost-effectiveness meaning that the costs of producing ESCB statistics must be in proportion to their merits and that resources must be used optimally. In this area there is a need to minimise the burden on

reporting entities. Possibility to use data directly and automatically from accounting record of companies minimise the workload from the respondent point of view.

## 7. Summary

Summing up, with the appropriate construction of accounting systems in companies, it should be possible to obtain reliable (of sufficient quality) data for the needs of balance of payments statistics. However, particular attention should be paid to the issues of unification and a certain degree of standardization of the concepts used in the case of data transferred for the purposes of compiling the balance of payments.

Recently, the statistical community made a lot of effort to unify regulations for National Accounts and balance of payments statistics. Currently both SNA 2008 and ESA 2010 are consistent with Balance of Payments and International Investment Position Manual. In our opinion there is a need to achieve greater consistency between National Accounts and national accounting, as data described by accounting law are important data source for macroeconomic statistics.

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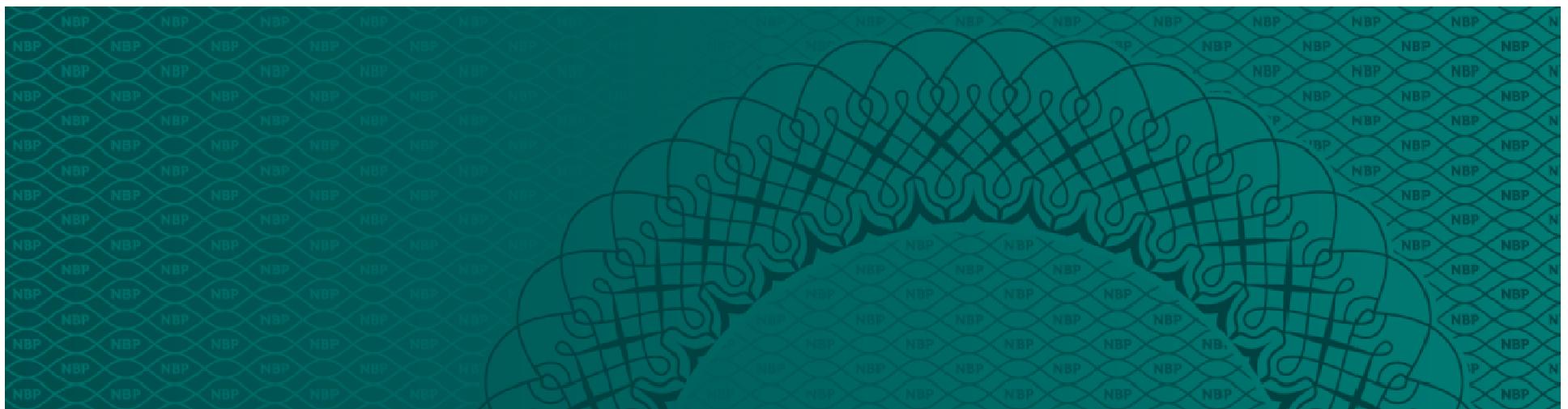
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Jacek Kocerka, Marcin Dwórzniak / Department of Statistics

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## **Accountancy records of companies and reporting for the external statistics needs**

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## Source of data

- The data submitted to NBP pursuant to the "Regulation of the minister of economic development and finance of 9 August 2017 on providing Narodowy Bank Polski with data necessary for the compilation of the balance of payments and the international investment position"\* and the data used or the calculation of the total amount of assets, liabilities and equity capital, the exceeding of which results in the occurrence of reporting obligations, hereinafter referred to as the "reporting threshold", should result from:
  - company's accounts or registers kept pursuant to separate provisions, or from source documents presenting the actual state of affairs, in the case of entities keeping account books;
  - source documents presenting the actual state of affairs, in the case of other entities not keeping account books.

\*Pursuant to Article 30(3) of the Act of 27 July 2002 – Foreign Exchange Law (Journal of Laws (Dziennik Ustaw) 2017, item 679)

## Common balance sheet and information about data to b.o.p.

ASSETS		LIABILITIES	
NON-CURRENT ASSETS (FIXED ASSETS)		EQUITY	Equity
Real estate			
Financial assets	Intangible assets Tangible fixed assets Long-term receivables Long-term investments	Share capital Supplementary capital Other reserve capitals Net profit (loss)	
Stocks and shares	CURRENT ASSETS		LIABILITIES AND PROVISIONS FOR LIABILITIES
Trade receivables	Inventories Short-term receivables Short-term investments	Provisions for liabilities Long-term liabilities Short-term liabilities	Credits and loans Trade liabilities Other liabilities
Deposits			
Other assets			

## Leasing

- In practice, we have two types of leasing: operating leasing and financial leasing.
- Operating lease is similar to a rental agreement.
- In the case of operating leasing, we are dealing with trade liabilities.
- In the case of financial leasing, we have a transfer of economic ownership to the lessee.
- In accordance with the new IFRS 16, any lease should be treated as a finance lease.
- In the case of financial leasing, we have financial obligations.

## Leasing

- The problem is that there is no uniform definition of leasing.
- The leasing categorization differs depending on whether we have to do with nGAAP or IFRS. Similarly, within one country, there may be different definitions depending on whether we are dealing with accounting or tax law.
- Important is a change in ownership from an economic point of view means that all risks, rewards, and rights and responsibilities of ownership in practice are transferred – we have such a situation in the case of financial leasing.

## Profit (loss) from current activity... Profit and loss account

No.	Item
A	<b>Net revenues from sales and equivalent, including revenues:</b>
B	<b>Operating expenses</b>
C	<b>Profit (loss) on sales</b>
D	<b>Other operating revenues</b>
I	Gain on disposal of non-financial fixed assets
II	Subsidies
III	Extraordinary gains
IV	Other operating revenues
E	<b>Other operating expenses</b>
I	Loss on disposal of non-financial fixed assets
II	Revaluation of non-financial assets
III	Extraordinary losses
IV	Other operating expenses
F	<b>Profit (loss) on operating activities</b>
G	<b>Financial revenues</b>
I	Dividend and profit sharing
II	Interest
III	Gain on disposal of investments
IV	Revaluation of investments
V	Other
H	<b>Financial expenses</b>
I	Interest
II	Loss on disposal of investments
III	Revaluation of investments
IV	Other
I	<b>Profit (loss) on business activities</b>
J	<b>Gross profit (loss)</b>
K	<b>Income tax</b>
L	<b>Other statutory reductions in profit (increases in loss)</b>
M	<b>Net profit (loss)</b>

## Gross profit (loss) from current activity.. IIP purposes

Profit (loss) on operating activities



Financial revenues: dividend and interest



Financial expenses: interest



Unpaid profit from direct investment



Losses on direct investment



Gross profit (loss) from current activity

### Corrections:

gains or losses from the revaluation

any gains or losses arising from valuation changes, such as inventory write-offs, write-downs, or write-ups

realized gains or losses from the disposal of assets

result on extraordinary events

## Current Operating Performance Concept (COPC)

Definition of COPC earnings consist of income from normal enterprise operations before non-recurring items (such as write-offs) and capital gains and losses are accounted for the earnings of direct investment enterprises reported using the “Current Operating Performance Concept” (COPC) should exclude:

- i. any gains or losses arising from valuation changes, such as inventory write-offs, write-downs, or write-ups;
- ii. gains or losses on plant and equipment from the closure of part or all of a business;
- iii. writing-off of intangible assets, including goodwill, due to unusual events;
- iv. writing-off of research and development expenditures capitalised in a prior period;
- v. provisions for losses on long-term contracts;
- vi. exchange rate gains and losses incurred by the direct investment enterprise both from its trading activities and from its holdings of foreign currency assets and liabilities;
- vii. unrealised gains or losses from the revaluation of fixed assets, investments and liabilities;
- viii. realised gains or losses made by the enterprise from the disposal of assets or liabilities.

## Valuation of business entities

- The problem is what to adopt when the company's market value is known or should it be accepted or the value of equity?
- In accordance with accounting law, the company can not make its own valuation; a certain approximation of the company's value is the value of its equity.
- The market value of the company results from the transaction carried out on the company's shares.

## High output quality

- Relevance of the statistical output
  - Received data are adapted to the needs of BoP statistics
  - Definitions for the needs of BoP and accounting should be closely related
  - Data come straight from companies
  - Accounting regulations on the basis of which data are collected on an ongoing basis are adapted to the expectations of recipients

## High output quality

- Accuracy and reliability (stability) of the statistical output
  - Received data are underestimated by unnecessary distortions (resulting, among others, from their coding)
  - Thanks to contact with data providers, it is possible to verify data
  - Data can be verified by obtaining additional explanations and / or direct access to the company's accounting system

## High output quality

- Consistency and comparability of the statistical output
  - Data comes from the accounting systems of companies in which they should comply with the basic accounting principles that are the same for everyone
  - Companies should care about consistency and comparability of the data presented between periods

## High output quality

- Timeliness (and punctuality) of the statistical output
  - Data in accounting systems should be recorded on an ongoing basis (which is in line with one of the basic accounting principles)



Narodowy Bank Polski

**Jacek Kocerka**

Deputy Director Department of Statistics

+48 22 185 18 20

jacek.kocerka@nbp.pl



Narodowy Bank Polski

**Marcin Dwórzniak**

Economic expert

+48 22 185 45 29

marcin.dworznik@nbp.pl

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