ON SOME IDEAS FOR IMPROVEMENT OF IDENTIFICATION AND RECORDING GAINS/LOSSES

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ABSTRACT

The aim of paper is to analyze the definitions and recording process of revenues and gains. The authors of current paper have worked out some suggestions for improving the reporting process taking into account the definitions of income, revenue, gains, losses and profit. Analyzing the inconsistency in two pairs of opposite terms (Profit and Loss and Gain and Loss) the authors came to conclusion that the amount named gain/loss in disposal of property, plant and equipment is rather correction or adjustment of previous miscalculation of depreciation expense due to the formula. To make aforementioned adjustments and show them separately a Contra depreciation expense account or Depreciation adjunct account is recommended.
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1. INTRODUCTION

Accounting is the systematic and comprehensive recording of financial transactions for pertaining to a business. An accounting information system collects and processes transaction data and then disseminates the financial information to interested parties. Accounting information systems are designed to support accounting functions and related activities. Financial accounting focuses on the reporting of an organization's financial information, including the preparation of financial statements, to external users of the information, such as investors, regulators and suppliers. For better results, it is important to have common understanding of basic terms and ways to process transactions. We agree with Mourier (2004) that accounting is a challenging subject requiring much specialist background knowledge, and financial reporting is an area with distinct terminology characteristics.

At the heart of the IFRS Conceptual Framework for Financial Reporting (hereafter the IFRS Framework) are the elements of financial statements (paras. 47–81), namely, *assets*, *liabilities*, *equity*, *income* and *expenses*. The IFRS Framework adopts a 'balance sheet approach' in that the definitions of liabilities, equity, income and expenses all follow inexorably from the definition of assets: liabilities are defined to be the opposite of assets, equity is the residual interest in assets having deducted liabilities, and income and expenses are defined as, respectively, increases and decreases in net assets (other than from transactions with equity holders). This balance sheet approach can be viewed simply as an application of the logic of double-entry accounting, which is that assets are sources of value that are necessarily equal to the claims on those sources, namely, equity and liabilities. The aim of current paper is to analyze the definitions and recording process of revenues and gains. The authors of current paper have worked out some suggestions for improving the reporting process taking into account the meanings of *income*, *revenue*, *gain* and *profit*.

2. INCOME, REVENUE AND GAIN

Income may have several meanings. First, income can be used interchangeably with revenue. Second, income may refer to the revenue from sources other than main operating activities (as a secondary type of revenue); for example, interest income, rent income, or commission income. Third, net income refers to the excess of income over expenses. According to the IFRS Framework p. 4.25 "Income is increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants."
In accordance with the IFRS Framework p. 4.29:

The definition of income encompasses both revenue and gains.

According to the IFRS Framework para. 4.29 "Revenue arises in the course of the **ordinary activities** of an entity and is referred to by a variety of different names including sales, fees, interest, dividends, royalties and rent". In IAS 18 (para. 7) revenue is defined as "The gross inflow of economic benefits during the period arising in the course of ordinary activities of an entity when those inflows result in increases in equity, other than increases relation to contributions from equity participants". After 1 January 2017, IFRS 15 will replace IAS 18. According to IFRS 15 (Appendix A: Defined terms) revenue is "income arising in the course of an entity's ordinary activities". Because the definition of income will not change, revenue can be defined as the gross amount of economic benefit flowing to an entity from its ordinary business activities that results in increases in equity other than from contributions made by equity holders (Burton, Jermakowicz, 2015, p. 467). Therefore, revenue is understood to be that part of a company's income resulting from its main (= operating) activities. In pure accounting terms, revenue is an increase in assets or decrease in liabilities on the company's books.

Gain is defined in many dictionaries. Business dictionaries (Collin 1997, Oxford Dictionary of the Business World 1993, Collins 2013, Friedman 2007, 2012, Scott 2009) emphasize the increase in profit, price or value, also increase of wealth or amount of money that is made by a company when selling a non-inventory asset for more than its value. More specific and comprehensive are Banking and Finance Dictionaries (Collin, 1994; Collins, 2013; Downes,

Goodman, 2014; Oldham, 1993; Briscoe, Fuller, 2007; Munn, Garcia, Woelfel, 1993; Wuite, 2009; QFinance, 2013) where gain is defined as the increase in the value of an asset that had been bought. Special attention is paid on stock and shares. The most exhaustive approach is taken by Munn, Garcia and Woelfel (1993) who have defined gains as "increases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions, events, and circumstances affecting the entity during a period except those that result from revenues or investments by owners. Gains often arise from events and circumstances that may be beyond the control of an enterprise or its managements. Gains can result from such activities as sale of investments in marketable securities, dispositions of used equipment, the settlement of liabilities at other than their carrying amounts, or the winning of a lawsuit". In Accounting Dictionaries (Nobes, 2002; Mooney, 2008; Siegel, Shim, 2005; 2010; French, 1994) the authors have pointed out the difference between gains and revenues. French (1994) has emphasized that "gains are usually contrasted with revenues. Gains and revenues together are called 'income'".

In accordance with the IFRS Framework p. 4.30 "Gains represent other items that meet the definition of income and may, or may not, arise in the course of the ordinary activities of an entity". Gains represent increases in economic benefits and as such are no different in nature from revenue. Hence, they are not regarded as constituting a separate element in the IFRS Framework (para. 4.30). We agree with J. M. Flood that "Gains are increases in equity resulting from transactions and economic events other than those that generate revenues or are investments from owners. … . Gains often result from transactions and other events that involve no earnings process. In terms of recognition, it is more significant that the gain be realized or realizable than earned." (Flood, 2015, p. 74)

Gains are commonly distinguished from revenues for three reasons (see Table 1).

Table 1: Gains vs revenues (Flood, 2015, p. 73)

Differences	Revenues	Gains
Connection with entity's activities	Usually result from an entity's central operations	Result from incidental or peripheral activities of the entity.
Earning process	Are usually earned.	Often result from nonreciprocal transactions (such as winning a lawsuit or receiving a gift) or other economic events for which there is no earnings process.
Reporting	Are reported gross.	Are reported net.

Comments to Table 1. Gains are secondary type of income, referring to incidental and nonrecurring transactions. According to the IFRS Framework p. 4.31, gains include, for example, those arising on the disposal of non-current assets. Gain on the disposal of fixed assets is called a gain because sale of fixed assets does not take place regularly. The definition of income also includes unrealized gains. When gains are recognized in the income statement, they are usually displayed separately because knowledge of them is useful for making business decisions. The distinction between revenues and gains once was a subject of considerable controversy. One school of thought believed that only revenues should be reported on income statements. The secondary or peripheral nature of gains means that they

did not represent recurring income from the entity's main area of income-producing activities and therefore should be excluded from the income statement. This school of thought has been called the *current operation income concept* (Wolk, 2001, p. 393). The competing position was called *all-inclusive income concept*. Its proponents believed that all revenues and gains, regardless of source, should be included in the income statement (Wolk, 2001, p. 393). There has been an evolution away from the current operating concept to the all-inclusive concept.

In accordance with the IFRS Framework p. 4.33:

The definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity.

According to the IFRS Framework para. 4.34 "Losses represent other items that meet the definition of expenses and may, or may not, arise in the course of the ordinary activities of the entity". Losses represent decreases in economic benefits and as such they are no different in nature from other expenses. Hence, they are not regarded as constituting a separate element in the IFRS Framework (para. 4.34).

Losses are commonly distinguished from other expenses for three reasons (see Table 2):

Table 2. Losses vs other expenses (Flood, 2015, p. 73)

Differences	Other expenses	Losses
Connection with entity's activities	Usually result from an entity's central operations.	Result from incidental or peripheral activities of the entity.
Earning process	Often incurred during earnings process.	Often result from nonreciprocal transactions (such as thefts or fines) or other economic events unrelated to an earnings process.
Reporting	Are reported gross.	Are reported net.

Comments to Table 2. Losses are secondary type of expenses, referring to incidental and nonrecurring transactions. The definition of expenses also includes unrealized losses. When losses are recognized in the income statement, they are usually displayed separately because knowledge of them is useful for making business decisions. To the user of IASs/IFRSs written in English, it seems that authors of the individual standards have applied whichever English terminology they are used to, and this terminology then becomes the IAS/IFRS English terminology. For example, Northern American accountants frequently talk about *net income* or *earnings* instead of *profit*. Although named the *income* statement, the format shown in the appendix to IAS 1 employs the term *profit* rather than *income* to individual items. In some countries (for example, Germany, Russia, Finland) in local language the same word is used for profit/gain as well as for their two counterparts – losses. For example, in IFRS, the concept of income encompasses both revenues and gains whereas in Finnish language does not differentiate between income and revenues, or between revenues and gains in a like manner.

According to IFRS Framework para. 4.60 "Profit is the residual amount that remains after expenses have been deducted from income. If expenses exceed income the residual amount is loss". Based on this axiom we can formulate following postulates:

1. **Profit/Loss is not defined in IFRS.** Instead of definition, calculation formula is indicated: Profit/Loss is the residual amount that remains after expenses have been deducted from income.
2. **Profit/Loss is difference between income and expenses.** Since the Profit/Loss cannot be measured directly as income and expenses are, they must be calculated mathematically as difference between income and expenses. Consequently, we cannot find profit/loss from transactions, from accounting entries; they are only subtotals or total in the income statement.

   NB! Income and expenses have definitions. As profit/loss is calculated as difference between income and expenses, it is not necessary to define profit/loss. Therefore, profit/loss are only technical terms.
3. **Profit cannot arise without income(s), loss without expense(s).** Revenues and expenses are primary (measurable) indicators for profit/loss calculations. **Profit/loss is the secondary indicator, not measurable directly but computable**, derived from income(s) and expense(s). **It is reason-consequence relation, where income(s) and expense(s) are reasons and profit/loss is consequence**.
4. Besides of income(s) and expense(s) the final amount of Profit/Loss can be affected by several corrections and adjustments which can be caused, for example, by revaluations, usage of different formulas (for example, for calculation of depreciation, amortization) etc. Finally, all these affect Profit/Loss through special form of Income/Expense called GAIN/LOSS.

   NB! As *profit* and *gain* are not identical (have different content), their opposite terms *loss* and *loss* are not identical too (have different content). We think this is a big shortcoming in terminology because resulted in many countries usage terms *profit/loss* instead of *gain/loss*.
5. **Because profit/loss do not appear in journal entries, it is not possible to correct or adjust them directly.** Corrections and adjustments will be made with help of corresponding entries by using gain(s) and loss(es).

3. GAINS AND LOSSES AS CORRECTIONS AND ADJUSTMENTS

The authors of current paper have worked out an example to show how to understand, identify and record Gains/Losses from sale of Property, Plant and Equipment (PPE).

3.1. Example

A piece of equipment was bought in beginning of the year for 10,000 EUR. The estimated usage life is 5 years. The expected residual value (terminal value) is 0. One year after purchase, the piece of equipment was sold for 7,000 EUR (for simplicity assume that net proceeds received are 7,000 EUR). The journal entry for recording the purchase of equipment:

Dr: Equipment 10,000
  Cr: Bank account 10,000

The depreciation is computed by using

1) straight-line method;
2) 150% declining balance (diminishing balance, reducing balance) method (depreciation rate is 30%);
3) double declining (double diminishing) balance method.

3.1.1 Journal entries when using straight-line method for depreciation (depreciation rate 20%)

Dr: Depreciation expense 2,000
Cr: Accumulated depreciation 2,000

At the end of the first year:

Equipment	10,000
Accumulated depreciation	(2,000)
Book value (depreciated cost)	8,000

Sale of equipment:

Journal entry	EUR	Explanation
Dr: Accounts Receivable	7,000	Invoice to the buyer. This is not sales revenue!
Dr: Accumulated depreciation	2,000	Accumulated depreciation is eliminated.
Dr: *LOSS*	1,000	Because according to this formula the depreciation expense was computed only 2,000 EUR, this resulted the book value of 8,000 EUR. So, it is necessary to adjust expenses by 1,000 EUR. Here *LOSS* is opposite to *GAIN*.
Cr: Equipment	10,000	The equipment is written off.

Comment

The steps in composing compound journal entry are following:

1. Invoicing the buyer (Dr: Accounts Receivable 7,000).

2.–3. Derecognition of piece of equipment from balance sheet (Dr: Accumulated depreciation 2,000 and Cr: Equipment 10,000).

4. Balancing of debits and credits (Dr: *LOSS* 1,000).

The term *LOSS* is not the same as in interconnection Profit/Loss because **it is not computed as difference – revenue minus expense**.

3.1.2 Journal entries using of 150% declining balance method for depreciation (depreciation rate is 30%)

Dr: Depreciation expense 3,000
Cr: Accumulated depreciation 3,000

At the end of the first year:

Equipment	10,000
Accumulated depreciation	(3,000)
Book value (depreciated cost)	7,000

Sale of equipment:

Journal entry	EUR	Explanation
Dr: Accounts Receivable	7,000	Invoice to the buyer. This is not sales revenue!
Dr: Accumulated depreciation	3,000	Accumulated depreciation is eliminated.
Cr: Equipment	10,000	The equipment is written off.

Comment. The steps in composing compound journal entry are following:

1. Invoicing the buyer (Dr: Accounts Receivable 7,000).
2.–3. Derecognition of piece of equipment from balance sheet (Dr: Accumulated depreciation 3,000 and Cr: Equipment 10,000).

The book value of equipment **is equal to the sales price**. It means that **there is no need for adjustment**.

3.1.3 Journal entries using of double-declining balance method for depreciation (depreciation rate is 40%)

Dr: Depreciation expense 4,000
Cr. Accumulated depreciation 4,000

At the end of the first year:

Equipment	10,000
Accumulated depreciation	(4,000)
Book value (depreciated cost)	6,000

Sale of equipment:

Journal entry	EUR	Explanation
Dr: Accounts Receivable	7,000	Invoice to the buyer. This is not sales revenue!
Dr: Accumulated depreciation	4,000	Accumulated depreciation is eliminated.
Cr: Equipment	10,000	The equipment will be written off.
Cr: *GAIN*	1,000	Because according to this formula the depreciation expense was computed 4,000 EUR (more than needed), this resulted the book value of 6,000 EUR. Therefore, it is necessary to make adjustment by 1,000 EUR.

Comment. The steps in composing compound journal entry are following:

1. Invoicing the buyer (Dr: Accounts Receivable 7,000).

2.–3. Derecognition of piece of equipment from balance sheet (Dr: Accumulated depreciation 4,000 and Cr: Equipment 10,000).

4. Balancing of debits and credits (Cr: *GAIN* 1,000).

Gain appeared in the compound journal entry is not profit, **because it is not difference between income(s) and expense(s)**.

3.2. General comments to example

The same initial numerical data were applied for all three versions:

- The same piece of equipment was acquired.
- The piece of equipment was bought for 10,000 EUR.
- The estimated usage life of piece of equipment was 5 years.
- The expected residual value (terminal value) was 0.
- One year after purchase the piece of equipment was sold for 7,000 EUR.
- All data above relate to the same company.

Conclusion: If do not think in terms of accounting, all versions are identical. The only difference is in formulas used.

Ideally the depreciation which is accumulated up to the time of disposal, will have reduced the book value down to the disposal value. Usually, however, this does not occur, and the company must recognize a gain or loss on the disposal.

In the first version (straight-line method was used) depreciation was computed less than needed. Instead of balancing debits and credits by correction of depreciation expense, another expense (*LOSS*) was indicated.

In the second version (150% declining balance method was used) formula used guaranteed exact amount of depreciation and no correction/adjustment was needed.

In the third version (double-declining balance method was used) depreciation was computed more than needed. Instead of balancing debits and credits by correction of depreciation expense, additional income (*GAIN*) was indicated.

Therefore, imprecisions of formulas used in versions 1 and 3 were corrected with two wrongdoings.

In comparison with version 2 in version 1 structure of expenses has been changed (*LOSS* is added). Depreciation expense is understated. In comparison with version 2 in version 3 income is overstated (*GAIN* is added) and depreciation expense is overstated. Although amounts of profits in income statement are exactly the same for all three versions, there are differences in income statements' structure and items as well as in grand totals of incomes and expenses. It is necessary to emphasize that although the income statement items used for balancing debits and credits have been named *LOSS* (version 1) and *GAIN* (version 3), to be exact, they are just what they are – items balancing debits and credits in compound journal entry.

We agree with Jaana Kettunen that "The interrelationship between the terms corresponding to *gains* and *profit* … might to be based on the idea that in accordance with to the flow based approach it may be argued that gains are in nature to a certain extend similar to profit because *gain* is a "net concept" of positive value (otherwise it would be a loss) while *revenue* is gross." (Kettunen, 2011, p. 14) Influenced by such similarity gains and profits are often equated. For example, Collings notes: "Among other things, gains often include profits arising on the disposal of non-current assets." (Collins, 2013, p. 152) Here is appropriate to note that gain is explicitly defined (as some kind of income) yet profit not. "Gross versus net" concept or approach is quite popular and has been used by many researchers (Barker, 2010; Nobes, 2012 and others). For example, Barker points out that "Revenue is a gross concept. That is, it does not involve the deduction of an expense or of the carrying value of a disposed asset. By contrast, the Standards that deal with gains require net measurements, that is, a gain is calculated as the difference between two values." (Barker 2010) According to "net concept" before making of journal entry GAIN/LOSS on the disposal of PPE should be calculated by formula

$$GAIN\ (LOSS) = Net\ proceeds\ received - \ PPE's\ net\ book\ value$$

The positive amount is determined as *GAIN* and negative amount as *LOSS*. Thereafter the journal entry will be made.

According to IAS 16 the derecognition of an item of property, plant and equipment is also based on "net concept": "The gain or loss arising from the derecognition of an item property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item." (IAS 16 para. 71) Illogicality of this requirement lies in the need to make calculation. If calculation as secondary method of measurement is acceptable in case of profit[1] it is not understandable in case of Gain/Loss. Recall that the definition of income encompasses both revenue and gains and according to the IFRS Framework para. 4.30 gains represent other items that meet the definition of income. Therefore, gain should correspond to the definition of income. Similarly, the definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity and according to the IFRS Framework para. 4.34 losses

[1] Profit is not defined in IFRSs. Instead of definition, calculation formula is indicated: profit is difference between income (revenues) and expenses.

represent other items that meet the definition of expenses. Therefore, loss should correspond to the definition of expense. Unfortunately, there is nothing stated in IAS 16 as well as in the other IFRSs how to test compliance of Gain/Loss with the definition of Income/Expense.

According to "transaction approach" used by the authors of this paper there is no need to make calculations. The need for balancing items in journal entries is caused by understated (versions 1) and overstated (version 3) depreciation expense. Therefore, items balancing debits and credits in compound journal entry are rather adjustments than GAINS/LOSSES. To make aforementioned adjustments and show them separately a *Contra depreciation expense* account or *Depreciation adjunct account* should be used.

Approach recommended by the authors of this paper guarantees identicalness of all three final income statements.

4. CONCLUSION

Through the process of analyzing the definitions and recording process of revenues and gains the authors of current paper worked out suggestions for improving the reporting process. In the paper inconsistency in two pairs of opposite terms: 1) Profit and Loss, and 2) Gain and Loss is shown. As profit and gain are not identical (have different content), their opposite terms loss and loss are not identical too (have different content). In paper seven postulates about profit and loss are formulated. These postulates are illustrated by means of transaction approach where different examples are worked out to show how to understand, identify and record gains/losses. According to the IFRS Framework gain should meet the definition of income as well as loss should meet the definition of expense. Unfortunately, there is nothing stated in IAS 16 as well as in other IFRSs how to test compliance of Gain/Loss with the definition of Income/Expense. In further development of examples the authors of current paper came to conclusion that the amount named gain/loss in disposal of PPE is rather correction or adjustment of previous miscalculation of depreciation expense due to the formula. To make aforementioned adjustments and show them separately a *Contra depreciation expense* account or *Depreciation adjunct account* is recommended.

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