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## **FINANCIAL REPORTING AND CHARACTERISTICS OF IMPAIRMENT OF ASSETS IN THE REPUBLIC OF SERBIA, ACCORDING TO IAS/IFRS AND NATIONAL REGULATION**

**ABSTRACT:** *Accounting for impairment of assets in the Republic of Serbia is set out under International Accounting Standards (IAS), International Financial Reporting Standards (IFRS), and national regulation (Book of Rules on Chart of Accounts). This paper presents research on the characteristics of impairment of assets in the Republic of Serbia in the period 2007-2009. The results of the research show an increase in the number of companies which*

*disclosed impairment losses, as well as an increase in the value of impairment losses, in which the impairment losses of accounts receivable constitute the largest part in the structure of impaired assets.*

**KEY WORDS:** *assets, impairment of assets, International Accounting Standards, International Financial Reporting Standards, Book of Rules on Chart of Accounts*

**JEL CLASSIFICATION:** M41, M48

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## **1. INTRODUCTION**

Financial statements should present results of realized transactions in a reporting period, and should give true and fair information about the financial position, results of operations, and cash flows. Various events could happen within the reporting period, such as a fall in the market value of assets, physical damage of assets, assets obsolescence, or other events which could result in a decrease in the value of a company's assets. If such events causing impairment of assets occur, the company should decrease the carrying amount to the recoverable amount. If not, the company's assets will be presented in a carrying value which exceeds their true value, which could lead to financial statement users making wrong decisions.

Accounting for impairment of assets in the Republic of Serbia is stipulated under International Accounting Standard 36 – Impairment of Assets, other relevant standards for specific assets, and national regulation. According to international accounting regulation (IASB, 2010, IAS 36 paragraph 2), IAS 36 is applied in accounting for the impairment of all assets, other than:

- Inventories (IAS 2 Inventories),
- Assets arising from construction contracts (IAS 11 Construction Contracts),
- Deferred tax assets (IAS 12 Income Taxes),
- Assets arising from employee benefits (IAS 19 Employee Benefits),
- Financial assets that are within the scope of IFRS 9 Financial Instruments,
- Investment property that is measured at fair value (IAS 40 Investment Property),
- Biological assets related to agricultural activity that are measured at fair value less costs to sell (IAS 41 Agriculture),
- Deferred acquisition costs, and intangible assets, arising from an insurer's contractual rights under insurance contracts within the scope of IFRS 4 Insurance Contracts, and
- Non-current assets (or disposal groups) classified as held for sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations.

These standards describe potential events that result in impairment of assets, methods for calculation of the recoverable amount, and accounting for impairment of assets. The standards also prescribe disclosure of information in reference to impairment of assets in financial statements.

Apart from international regulation, accounting for impairment of assets in the Republic of Serbia is set out under the Book of Rules on Chart of Accounts and Content of Accounts of Companies and Cooperatives (hereinafter referred to as Book of Rules on Chart of Accounts). The Book of Rules on Chart of Accounts defines accounts that should be used in accounting for impairment of assets.

The objective of this paper is to present research on the implementation of international and national rules which regulate accounting for impairment of assets in the Republic of Serbia, and to analyze characteristics of impairment loss in financial statements of Serbian companies. The research is based on a sample of 225 financial statements of large-sized and medium-sized companies in the Republic of Serbia for the period 2007-2009.

## **2. IMPAIRMENT OF ASSETS**

One of the important regulatory requirements of financial reporting is that the carrying amounts of assets which are disclosed in financial statements should not exceed their recoverable amounts. If the carrying amount exceeds the amount which can be recovered, either by use or sale of the asset, then the carrying amount should be decreased. This means that assets are carried at no more than their recoverable amount. A decrease of the carrying amount to represent the recoverable amounts results in impairment of assets; that is, in impairment loss.

According to accounting regulation (IASB, 2010, IAS 36 paragraph 6), the recoverable amount of an asset is one of these values:

- fair value less costs to sell, or
- value in use.

Fair value less costs to sell is the amount obtainable from the sale of an asset. Identification of fair value is based on a presumption that the sale occurs in an arm's length transaction between knowledgeable, willing parties, for the amount which is then decreased for the costs of disposal. If there is no binding sale agreement, and an asset is traded in an active market, fair value less costs to sell is calculated as the asset's market price less the costs of disposal. If there is neither a binding sale agreement nor an active market, fair value less costs to sell can be based on the best information which indicates the amount which could be obtained by sale of an asset at the end of the reporting period.

Costs of disposal have to be deducted in order to determine fair value less costs to sell. Examples of costs of disposal are: administrative costs, costs of removing the asset, stamp duty and similar transaction taxes, and direct incremental costs to bring an asset into condition for its sale.

Value in use is the present amount of the future cash flows expected to be derived from continuing use of the asset and from its ultimate disposal. The computation of value in use involves a two-step process: first, future cash flows must be estimated; and second, the present value of these cash flows must be calculated by application of an appropriate discount rate (Epstein and Jermakowicz, 2008, p. 248).

The recoverable amount is the higher of its fair values, less costs to sell and its value in use. However, if it is believed that the value in use is insignificantly higher than its fair value less cost to sell, it is not necessary to determine value in use. In these circumstances, fair value less costs to sell can be taken as the recoverable amount. Nor is it necessary to determine both fair value less costs to sell and value in use, if the fair value less costs to sell is higher than the carrying amount of the asset. The asset is not impaired in this situation, so value of use is of no significance.

### **3. INDICATORS OF IMPAIRMENT LOSS**

At the end of each reporting period a company should consider whether there is any indication that an asset may be impaired. If such indicators exist the company should estimate the recoverable amount of the asset.

In assessing indication of impairment the company should acquire information from external and internal sources. External sources of information which indicate the impairment of assets are:

- A significant decline during the period in an asset's market value, above that which would be expected as a result of the passage of time or normal use.
- Significant changes with an adverse effect on the entity occurring during the period, or likely to occur in the near future, in the technological, market, economic, or legal environment in which the entity operates.
- Market interest rates or other market rates of return on investments increasing during the period, these increases being likely to affect the discount rate used

in calculating an asset's value in use and to decrease the asset's recoverable amount materially.

- The carrying amount of the net assets of the entity being more than its market capitalization. (IASB, 2010, IAS 36 paragraph 12)

According to IAS 36, internal sources of information which indicate the impairment of assets are:

- Evidence of obsolescence or physical damage of an asset.
- Significant changes with an adverse effect on the entity occurring during the period, or likely to occur in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite.
- Evidence from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.
- Evidence available from internal reporting that indicates that cash flows for acquiring the asset, or subsequent cash needs for operating or maintaining it, are significantly higher than those originally budgeted;
- Actual net cash flows or operating profit or loss flowing from the assets that are significantly worse than those budgeted.

Companies should not measure the recoverable amount of an asset if there are no previous indications that the asset might be impaired. The exception to this rule refers to intangible assets with an indefinite useful life, intangible assets not yet available for use, and goodwill, which should be tested for impairment at least annually. This exception is made because the determination of the value of intangible assets and goodwill, and their impairment, is very difficult because of their characteristics. Using intangible assets many times without affecting their value, the synergistic effect of intangible assets with other assets, and a huge difference between the cost of intangible assets and the returns they provide, are some of the characteristics that make an assessment of the value of intangible assets and their impairment very difficult (see Nethercott and Anamourlis, 2009, p 16).

#### **4. ACCOUNTING FOR IMPAIRMENT LOSS**

If impairment loss has occurred, companies have to make carrying value adjustments. Impairment loss can be accounted for differently, depending on whether the asset is measured at acquisition cost or fair value. According to the Book of Rules on Chart of Accounts (see: “Sluzbeni glasnik RS” 114/2006, 2006, article 46), if the asset is non-revalued, impairment loss is recognized directly in the income statement as “Other expense” (account group 58 – Expenses from impairment of assets). If the asset is revalued, impairment loss is recognized as a reduction in equity (account group 33 - Revaluation reserves) to the level of the revaluation reserves, and after that in the income statement as “Other expense” (account group 58 – Expenses from impairment of assets).

If, at the end of a reporting period, a company notices indications that an impairment loss which was recognized in previous periods may no longer exist or may have decreased, it should estimate and account for the recoverable amount of that asset.

In assessing whether previous impairment loss should be cancelled, the company should acquire information both from external and internal sources. According to IAS 36, external sources of information which indicate the need for cancellation of impairment loss are:

- A significant increase in the asset’s market value during the period.
- Significant changes with a favourable effect on the entity occurring during the period, or likely to occur in the near future, in the technological, market, economic, or legal environment in which the entity operates, or in the market to which the asset is dedicated.
- Market interest rates or other market rates of return on investments decreasing during the period, these decreases being likely to affect the discount rate used in calculating the asset’s value in use, and to increase the asset’s recoverable amount materially.

Internal sources of information which indicate the need for cancellation of impairment loss are:

- Significant changes with a favourable effect on the entity taking place during the period, or likely to take place in the near future, in the extent to which, or manner in which, the asset is used or is expected to be used. These changes

include costs incurred during the period to improve or enhance the asset's performance or restructure the operation to which the asset belongs.

- Evidence from internal reporting that indicates that the economic performance of the asset is, or will be, better than expected. (IASB, 2010, IAS 36 paragraphs 111 and 114)

If any of the previous situations occur in the reporting period, the company should increase its carrying amount to the recoverable amount. An increase in the carrying amount is accounted for as a reversal of impairment loss. The Book of Rules on Chart of Accounts (see: "Sluzbeni glasnik RS", 114/2006, 2006, article 56) stipulates that reversal of an impairment loss should be recognized in the income statement as "Other revenue" (account group 68 – Revenue from impairment). In the case of revalued assets, the reversal of impairment loss above the level of the previous impairment is accounted for as an increase in revaluation reserves.

## **5. DISCLOSURE REQUIREMENTS FOR IMPAIRMENT OF ASSETS**

For each class of assets "the amount of impairment losses recognized in earnings for each period being reported upon must be stated, with an indication of where in the income statement it has been included (i.e., as part of depreciation or with other charges). For each class of asset, the amount of any reversals of previously recognized impairment must also be stipulated, again with an identification of where in the income statement this has been included." (Epstein and Jermakowicz, 2008, p 255) This information is disclosed in notes to the financial statements.

For each material impairment a company should disclose the following loss, recognized or reversed during the period for an individual asset:

- a) The events and circumstances that led to the recognition or reversal of the impairment loss.
- b) The amount of the impairment loss recognized or reversed.
- c) For an individual asset:
  - The nature of the asset; and
  - If the entity reports segment information in accordance with IFRS 8, the reportable segment to which the asset belongs.
- d) Whether the recoverable amount of the asset (cash-generating unit) is its fair value less costs to sell, or its value in use.

- e) If the recoverable amount is fair value less costs to sell, the basis used to determine fair value less costs to sell (such as whether the fair value was determined by reference to an active market).
- f) If the recoverable amount is value in use, the discount rate(s) used in the current estimate and previous estimate (if any) of value in use. (IASB, 2010, IAS 36 paragraph 130)

The following are examples of adequate disclosure of impairment loss in an income statement, and other information relevant to impairment of assets.

**Text box 1.** Disclosure of Impairment of Assets in Income Statement and Explanation of Significant Items

Other expenses:	In thousands of dinars	
	<b>2009</b>	<b>2008</b>
...		
Impairment of long-term investments	5.000	0
Impairment of inventory	1.229	988
Impairment of accounts receivable	1.339	1.459
...		
<p>Impairment of long-term investments arose from a decrease in the market value of shares of “MM trade” Belgrade. Shares are measured at fair value, which equals their market value as of December 31, 2009.</p> <p>Impairment of inventory refers to the decrease in value of merchandise “A” available at balance sheet date. The inventory is impaired due to a decrease in the market value of the inventory, which is lower than the acquisition cost.</p> <p>Impairment of accounts receivable refers to impairment of receivables which were not collected within 90 days after the due date.</p>		

**Text box 2.** Disclosure of Impairment of Revalued Assets with Explanation of Significant Items

	In thousands of dinars	
	2009	2008
Revaluation reserves:		
Opening balance	55.000	55.000
Decrease – impairment of land	(2.000)	–
Closing balance	53.000	55.000

Decrease in the value of land to the amount of 2,000 dinars refers to the impairment of land due to a decrease in market value. Land is measured at fair value by independent appraisal.

**6. CHARACTERISTICS OF THE DISCLOSURE OF IMPAIRMENT OF ASSETS IN THE REPUBLIC OF SERBIA**

The research into the characteristics of disclosure of impairment of assets in the Republic of Serbia is based on a sample of 225 financial statements of large-sized and medium-sized companies for the period 2007-2009.

Characteristics of the disclosure are investigated according to the following:

- Percentage of companies which disclosed impairment of assets, and
- Percentage of companies which disclosed additional information on significant impairment of assets.

**6.1 Disclosure of Impairment of Assets**

The research into disclosure of impairment of assets is based on the investigation of the percentage of companies which disclosed impairment of assets in notes to their financial statements. An overview of the percentage of companies which disclosed impairment of classes of assets in the period 2007-2009 is given in the following table.

**Table 1.** Percentage of Companies which Disclosed Impairment of Assets in the Republic of Serbia in the Period 2007-2009

Asset	Year		
	2007	2008	2009
Intangible assets	0%	1%	1%
Property, plant, and equipment	4%	12%	9%
Biological assets	0%	0%	2%
Long-term investments	12%	13%	15%
Inventory	16%	22%	26%
Accounts receivable and short-term investments	24%	54%	64%

**Source:** Authors' calculations, Business Registers Agency

Based on the research results, we can see that there was an increase in the number of companies in the Republic of Serbia which disclosed impairment of assets in the period 2007-2009.

The research also showed that 44% of companies disclosed no impairment of assets in 2007, 26% in 2008, and 21% in 2009.

An additional result of the research is the observation that, in 2008 and 2009, 1% of companies made inadequate disclosure of impairment of assets. These companies did not disclose impairment of assets divided into classes of assets, as required under international regulations and the Book of Rules on Chart of Accounts.

## **6.2 Disclosure of Additional Information on Significant Impairment of Assets**

As set out under accounting regulations, companies should disclose additional information for each significant impairment. In this research the percentage of companies in the Republic of Serbia which disclosed information on significant impairments in the period 2007-2009 was examined. Results are presented in the following table.

**Table 2.** Percentage of Companies Which Disclosed Additional Information on Significant Impairment of Assets in the Republic of Serbia in the Period 2007-2009

Additional information on significant impairments	Year		
	2007	2008	2009
Events which led to impairment	12%	17%	18%
Nature of asset	12%	17%	18%
Type of recoverable amount – fair value or value in use	8%	8%	9%
The method of determination of fair value	2%	4%	2%
Discount rate for calculation of value in use	0%	2%	2%

**Source:** Authors' calculations, Business Registers Agency

The research evidences an increase in the number of companies which disclosed additional information on significant impairments. In 2009 18% of companies disclosed this information, while in 2008 and 2007 that percentage was 17% and 12%, respectively. However it can also be observed that the quality of the information provided is unsatisfactory and the companies did not disclose all the information required under accounting regulations. For example, only 18% of companies recognized that disclosed impairment of assets was significant and that it needed additional explanation. Out of that number, 9% of companies made reference to the type of recoverable amount (fair value or value in use), and only 2% out of 18% of companies explained the method of determination or fair value or discount rate used to calculate value in use.

## **7. THE CHARACTERISTICS OF IMPAIRED ASSETS IN THE REPUBLIC OF SERBIA**

Research into the characteristics of impaired assets in the Republic of Serbia is based on investigation of the following:

- Percentage of impaired classes of assets compared to total classes of assets,
- Net impairment loss, and
- Structure of impairment loss.

### 7.1 Impairment of Classes of Assets Compared to Total Classes of Assets

The characteristics of impairment of classes of assets were investigated as a percentage of impaired classes of assets in the period 2007-2009. The results of the research are shown in the following table:

**Table 3.** Percentage of Impaired Classes of Assets in the Republic of Serbia in the Period 2007-2009

Asset	Year		
	2007	2008	2009
Intangible assets	0%	0.28%	0.02%
Property, plant, and equipment	0.01%	0.05%	0.10%
Biological assets	0%	0%	0.84%
Long-term investments	0.25%	0.32%	0.54%
Inventory	0.11%	0.79%	1.85%
Accounts receivable and short-term investments	0.32%	5.99%	7.37%
<b>Total assets</b>	<b>0.14%</b>	<b>1.34%</b>	<b>1.87%</b>

**Source:** Authors' calculations, Business Registers Agency

It can be observed that impairment loss increased annually in the period 2007-2009. In 2007 only 0.14% of the value of total assets was impaired, in 2008 that percentage was 1.34%, and in 2009 it was 1.87%. Impairment of accounts receivable and short-term investments has the highest growth and the highest participation in total impairment loss. In 2007 0.32% of accounts receivable and short-term investments were impaired, in 2008 5.99%, and in 2009 7.37%. These results are expected, since the difficult economic situation led to liquidity problems and the inability of companies to collect receivables. Impairment loss for all classes of assets except intangible assets also increased in the observed period. The impairment loss of property, plant, and equipment is relatively low. Since the level of construction activity in 2009 decreased by 19.7%, and the value of construction undertaken decreased by 29.3% (NBS, 2010, p. 31), it was expected that impairment of property, plant, and equipment would be higher.

### 7.2 Net Impairment Loss

Taking into consideration that in the period 2007-2009 companies made reversals of impairment loss, it is necessary to observe the net effect of impairment of assets. Impairment loss which is disclosed as an expense was offset by a reversal of an

impairment of assets, which was accounted for as revenue in order to determine the net effect of the impairment process. Results of the research are presented in the following table:

**Table 4.** Net Effect of Impairment of Classes of Assets in the Republic of Serbia in the Period 2007-2009

Asset	Year		
	2007	2008	2009
Intangible assets	0%	0.28%	0.02%
Property, plant, and equipment	(0.16%)	0.03%	0.08%
Biological assets	0%	0%	0.11%
Long-term investments	0.25%	0.31%	0.53%
Inventory	0.11%	0.79%	1.84%
Accounts receivable and short-term investments	0.31%	5.95%	5.31%
<b>Total assets</b>	<b>0.04%</b>	<b>1.30%</b>	<b>1.39%</b>

**Source:** Authors' calculations, Business Registers Agency

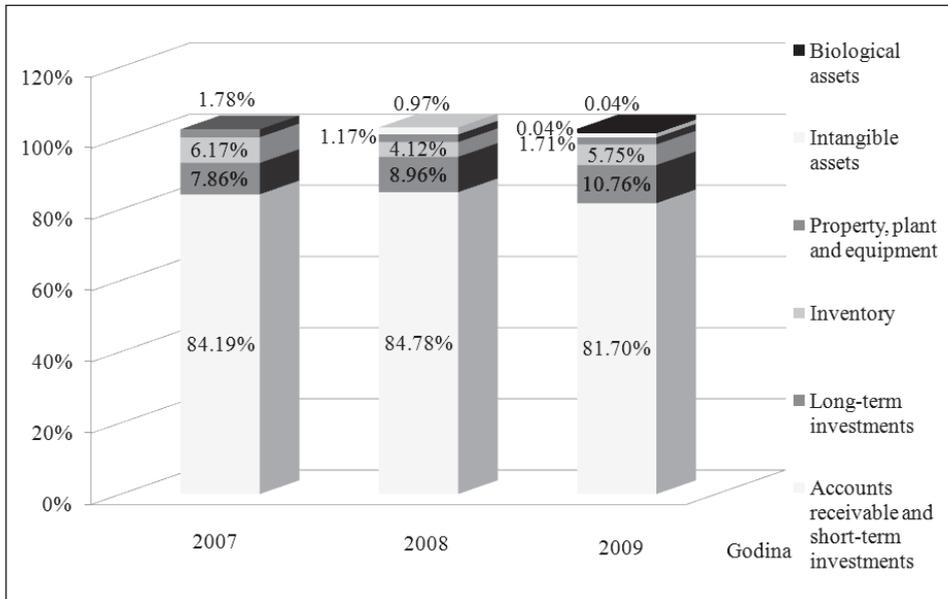
Significant deviation of total net effect of impairment is observed in 2007. In that year net impairment loss was 0.04% of the total value of assets, and impairment loss without offset for reversal of impairment was 0.14%. The difference is mainly caused by a significant reversal of impairment of property, plant, and equipment, which was even higher than the impairment loss accounted for in that period.

The second significant deviation is observed in 2009. In that year net impairment loss was 1.39% of the total value of assets, and impairment loss without offset for reversal of impairment was 1.87%. The difference is mainly caused by a 2.29% reversal of impairment loss of receivables and short-term investments, and a 0.73% reversal of impairment loss of biological assets. Since additional information on reversal of impairment loss was not disclosed in the sampled financial statements, we were not able to determine the conditions which led to the significant reversals of impairment loss.

### 7.3 Structure of Impaired Loss

The structure of impairment loss can be determined as the participation of impairment loss of a class of assets in the total impairment loss. The structure of impairment loss for the period 2007-2009 is presented in the following figure.

**Figure 1.** Structure of Impairment Loss in the Republic of Serbia in the Period 2007-2009

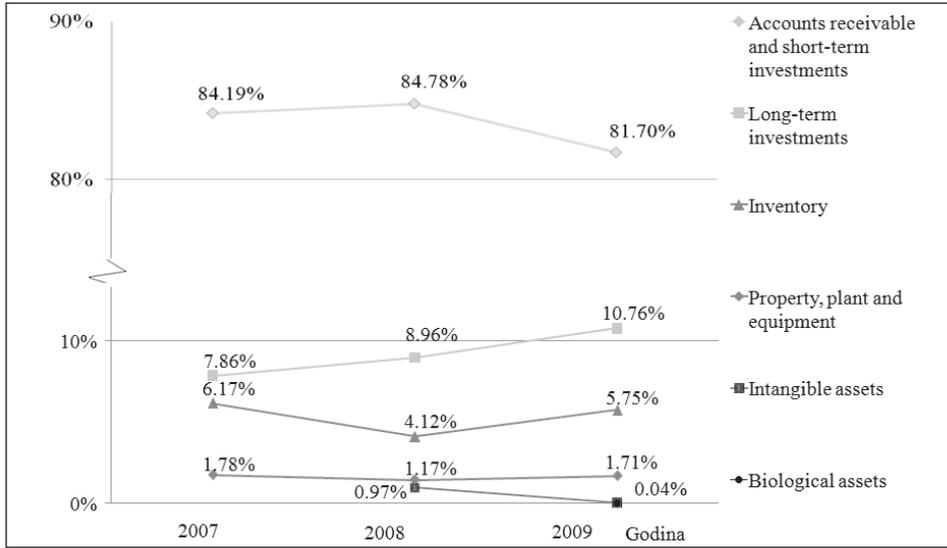


**Source:** Authors' calculations, Business Registers Agency

The structure of impairment loss in 2009, as in previous years, showed that the impairment loss mostly arose from impairment of accounts receivable and short-term investments, which constituted 81.7% of the total. Loss from impairment of long-term investments constitute 10.76% of total impairment loss, loss from impairment of inventory 5.75%, loss from impairment of property, plant, and equipment 1.71%, loss from impairment of intangible assets 0.04%, and loss from impairment of biological assets 0.04%.

Compared to 2007 and 2008, it can be observed that in 2009 participation of loss from impairment of accounts receivable and short-term investments, although the most significant, has decreased, and participation of loss from impairment of long-term investment has increased. Again, it can be noticed that loss from impairment of property, plant, and equipment has an unexpectedly small participation in the total impairment loss, particularly if we take into consideration that property, plant, and equipment is frequently one of the largest balance sheet items. Participation of loss from impairment of classes of assets in total impairment loss in the period 2007-2009 is presented in the following figure.

**Figure 2.** Change in Participation of Loss from Impairment of Classes of Assets in Total Impairment Loss in the Republic of Serbia in the Period 2007-2009



Source: Authors' calculations, Business Registers Agency

## 8. CONCLUSIONS

Based on the investigation of financial statements of companies in the Republic of Serbia in the period 2007-2009, an increase in the number of companies which disclosed impairment of assets and in the amount of impairment loss can be recognized. In 2009 79% of companies disclosed impairment of assets, which is significantly higher than the 56% of companies in 2007. An absolute and relative increase in impairment loss can also be noticed in the observed period. The ratio of impairment loss and total assets which could be impaired showed an increase, from 0.14% in 2007 to 1.87% in 2009. This increase in impairment loss is expected, when business conditions in Republic of Serbia are taken into consideration.

Research on the net effect of impairment loss showed the significant impact of reversing an impairment loss, mostly due to reversal of accounts receivable and short-term investments.

Further, the research showed that accounts receivable and short-term investments have the highest rate of impairment, and that consequently loss from impairment

of accounts receivable and short-term investments has the highest participation in total impairment loss, followed by loss from impairment of long-term investments, loss from impairment of inventory, etc. The research also revealed an unexpectedly small rate of impairment of property, plant, and equipment (in 2009 only 0.1% of the total value of property, plant, and equipment was impaired), especially when the problems of the construction business in the Republic of Serbia are taken into consideration.

It can also be noticed that the number of companies which disclosed additional information about significant impairment of assets increased in the observed period, but the quality of disclosure of additional information cannot be accepted as satisfactory, since companies did not conform to all disclosure requirements of international and national regulation.

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