Immaterial resources are hard to fit into the framework of the prevailing financial reporting regulations (both in Hungary and abroad). The reason for this lies in the asset definitions applied on the one hand, and in the criteria for balance sheet constraints on the other hand. Stringent regulations are intended to ensure that items with uncertain returns are not included in the balance sheet (principle of prudence). As a result, relatively few immaterial resources are quantified in the accounting statements under assets.

At the same time, stakeholders would obviously like to obtain information on knowledge assets and other immaterial resources that have an important role in the new type of economy, given that the possession or the lack of such assets can have a strong influence on market developments. One of the tools for the recovery from the financial/economic crisis that began in 2007–2008 may be the creation and strengthening of a technology and knowledge-based economy, in accordance with EU objectives (Pelle – Végh, 2014). The knowledge-based economy is supported by human resources, which help implement development and innovation projects. With a properly designed corporate strategy these strengths can pave the way for success. On the other hand, due to the special features of the regulations, the resources listed in accounting statements are typically not quantified. Most legislators believe that this problem can be solved by the information included in the notes on the financial statements, which may, in the optimal case, contain retrospective data for several business years in connection with items such as research and development (Deák...
Lukovics, 2014). Providing information in the notes obviously has its limitations (costs of reporting) and pre-requisites (the record-keeping and conscious management of intangible assets). According to Sax-Andor (2014), the notes only reveal the items required by law, as in most cases executive officers do not consider the disclosure of extra information to be important.

The goal of financial reporting is to disclose all information to the users of the reports that are necessary for them to make informed economic decisions (principle of relevance). If, however, economic entities choose tools other than the financial statements for the disclosure of information, the financial statements will not serve the very purpose they were intended for, considering that knowledge assets and other intangible resources are undeniably relevant for stakeholders. The importance of this problem is aptly demonstrated by the calculations that seek to find out the extent to which book value is reflected in the market value of globally active companies. According to the data published in a study by the Institute of Management Accountants (2010), economic entities recognise about 35 per cent of their real assets in their balance sheets.

The root of this problem is that, in the area of accounting theory and practice pertaining to intangibles, a balance should be struck between such reporting principles as relevance and prudence, which poses a great challenge to economic entities and legislators alike. Upton’s (2001) comprehensive study on the problem mentioned above was published after the turn of the millennium, and it provides an overview of the possible solutions, including their advantages and disadvantages. According to Shortridge – Smith (2009), the standards of financial reporting should be modified in order to be able to keep pace with the changes that have occurred in the knowledge-based economy. They presented specific ideas about the structuring of the new reporting paradigm (see Chart 1).

Only a limited list of internally produced intangible assets can be presented (quantified) in the financial statements (e.g. development costs). At the same time, the restrictive balance sheet criteria do not imply that non-compliant factors cannot be included in the financial statements (for more detail, see Deák (2006) on reporting capacity). Some businesses choose another tool for reporting voluntary information on “soft factors”: they publish sustainability reports and documents on corporate social responsibility. The question arises: why should companies devote resources to gain a more comprehensive view of their immaterial resources?

Bellora – Guenther (2013) sum up the advantages of voluntary disclosure of information with respect to innovation: it creates a positive impression of the business and reduces the information asymmetry between managers and owners, thereby reducing the costs of acquiring capital. In addition to the advantages, businesses obviously consider the possible disadvantages as well (disclosing competition-sensitive information) when formulating their accounting strategies for intangibles. Voluntary disclosure of information may help catch the attention of investors who, in line with the trends of recent years, have an increased focus on corporate social responsibility. Flammer (2013) claims that CSR (Corporate Social Responsibility) reports function as a kind of assurance resource: a more pronounced CSR activity may mitigate negative investor responses to events with a potentially detrimental impact on the environment. The public also sets expectations for the companies, as people view economic entities indifferent to the impact of their operations on the society or the environment as less valuable (Institute of Management Accountants,
According to Ván (2014), integrated accounting systems quantifying environmental factors should be regarded as a competitive advantage.

Studies using international samples (Kang – Gray, 2011; Kuma, 2013; Ragini, 2012) established that there are certain differences among the countries in respect of the types of intangible assists and the level of information domestic economic entities disclose in their public statements to stakeholders. Ragini (2012) published a study analysing the financial statements of Indian, US and Japanese companies between 2001 and 2005 in order to identify the intangible items presented. For the purposes of the study, the largest US (100), Indian (100) and Japanese (60) companies were included in the sample. Ragini identified 180 intangible items, and after having counted their number of occurrence, he assigned a score to each statement (it was irrelevant whether the given item appeared once or more. The maximum number of points was 180). He grouped the items around the following topics:

- research and development (20 items);
- strategy and competition (30 items);
- market and consumer (36 items);
- human resources (26 items);
- rights related to intellectual property, goodwill and other intangibles (25 items);
- corporate and ownership information (18 items);
- environmental and other immaterial factors (25 items).

As for the nature of the information disclosed, Indian companies took the lead in providing information on R&D and human resources; American firms published extremely extensive information on strategy and competition, the market and consumers, as well as on intellectual property, while Japanese...
enterprises lead the way in presenting corporate and ownership data and environmental factors.

One of the goals of this study is to explore the amount of information presented on intangible assets in the financial statements of the large Hungarian companies included in the sample. Another goal of the research is to analyse Hungarian accounting regulations, as we believe it would be important to identify the extent to which our accounting system supports the inclusion of intangibles in the financial statements.

**THE HUNGARIAN ACT ON ACCOUNTING AND INTANGIBLES**

The research we conducted was based on the methodology used by Ragini (2012). In his study, Ragini published a list of 180 intangible items which can be used to calculate the indicator he refers to as the publication index. This index can be applied to a Hungarian sample to measure the level of disclosure of immaterial factors; in addition, it also enables us to examine the extent to which individual regulatory systems support or require the disclosure of information on intangible assets. The latter would be especially important, as the scores that can be assigned to the financial statements of companies largely depend on the standards underlying the statements. Below we examine the accounting practice prescribed by the Hungarian accounting regulation.

Economic entities can use various tools for communicating with their stakeholders (see Chart 2). The accounting report, however, is the only – presumably – public information carrier that is prepared by all economic entities. Therefore, it can be seen as a primary and key source of information for various stakeholder groups, e.g. potential creditors, investors and analysts. While the business report is officially not part of the financial statements, under the Act on Accounting, it must be prepared together with the annual report. These documents are governed by different rules of disclosure: while the annual accounting report must be uploaded to a designated portal (National Company Register and Company Information System), the only requirement for the business report is that it should be made available to view at the registered address of the company. The latter solution means that contrary to the accounting report, the business report cannot be downloaded by users on the Internet, so its real use is questionable. Sustainability reports, the documents on corporate social responsibility and similar other reports may contain a considerable amount of information on intangible assets. These documents, however, are prepared on a voluntary basis and according to a different methodology at each economic entity, which renders the data incomparable.

For this reason, in our study we focus on the information disclosed in the accounting report. Next, we examine the intangible assets on which data are disclosed on a mandatory basis in the accounting reports prepared in accordance with Hungarian regulations. Our analysis is also intended to identify how many of the 180 intangible items are, as a rule, included in Hungarian financial statements (their inclusion is a statutory requirement). Contrary to international standards, Hungary’s Act on Accounting does not regulate the range of assets to be included in the balance sheet on principle. The prevailing Hungarian legislation includes a balance sheet template; that is, it provides a specific list of the possible assets to be included. The following intangible assets may be included in the balance sheet under fixed assets:

1. Capitalised value of formation/restructuring
2 Capitalised value of research and development
3 Concessions, licenses and similar rights
4 Trademarks, patents and similar assets
5 Goodwill

Adherence to the regulation thus ensures that the companies present intangible assets in their financial statements separately, depending on their form and function. The latter requirement is important to stress because, for example, the international standards do not contain a balance sheet template, and economic entities are free to choose their own breakdown provided that they adhere to the minimum structure prescribed for the balance sheet. It may happen, however, that they present only the consolidated value of intangibles assets. Hungarian economic entities can do so if they are required to prepare a simplified annual report or a simplified annual report for micro enterprises, because in the former case the items may be omitted, while in the latter case they must be omitted (the structure is only required for the main groups and the subgroups).

Businesses must report intangible assets not only in the balance sheet but also in the written notes included in the annual report. Pursuant to the provisions of the Accounting Act (Sections 88–94), the supplementary notes on the accounts must contain, among other things, the following items relevant to the topics at hand:

- key elements of the accounting policy and their changes;
- valuation procedures and the method of accounting for depreciation;
- transactions concluded with affiliated parties;
- remuneration of executive officers, members of the board of directors and the supervisory board, including pension obligations to the executive officers;
- names and place of residence of the
persons authorised to sign the financial statements;
• off-balance sheet items;
• fair value of futures, option and swap contracts open as at the balance sheet date and their impact on earnings;
• fair value of financial instruments (if applicable);
• average statistical number and wage costs of employees in a breakdown of groups of staff;
• opening gross value of intangible assets with, their increases or decreases;
• sales revenues from exports broken down by EU and other countries;
• current year costs of research and experimental development;
• data pertaining to the tangible assets directly serving the protection of the environment;
• volume and value data pertaining to hazardous waste;
• environmental commitments and their costs.

These types of information must be included in the financial statements if the given item is relevant (obviously, the financial statements will not provide information on off-balance items if they are not applicable). Compared to the list presented by Ragini, we can conclude that the financial statements prepared by Hungarian companies will contain at least 26 items if the balance sheet and the supplementary notes are prepared as required.

In Hungary, the economic entities are also required to prepare a business report (for the financial statements), which contains additional information on the following:
• key risk factors and uncertainties imminent in the company’s activities;
• any improvements in business trends, performance;
• any significant events which took place following the balance sheet date;
• research and experimental development;
• business premises;
• employment policy;
• role of environmental protection, the company’s environment-related commitments and responsibilities, applied policy and measures;
• risk management and hedging transaction policy;
• price, credit, interest rate, liquidity and cash flow risks;
• for businesses listed on a stock exchange of the European Union:
  • investors with substantial influence;
• for businesses with securities traded on one of the regulated markets of the European Economic Area:
  • rules and practices of corporate governance.

Accordingly, the business report presents at least 11 additional intangible items from those proposed by Ragini for the financial statements (13 items for listed companies). These values do not apply for businesses required to prepare a simplified financial statements or financial statements for micro enterprises. The supplementary notes in the simplified financial statements have a more limited content, and the business report is not obligatory. As for the simplified financial statements for micro enterprises, the supplementary notes are not required at all. Indeed, even if a business does include them voluntarily, it will not be able to publish them in any case, as the portal used for uploading the statements does not support this option.

Actual data may of course be different, as the businesses may disclose data on a voluntary basis, which further increases their score. The empirical study presented below was designed to create a sample by examining the financial statements of the top 30 Hungarian companies, on the basis of which we can gain an insight into the reporting practice of large companies pertaining to intangibles.
RESULTS OF THE ANALYSIS OF FINANCIAL STATEMENTS

Below we present the findings of our research on the topics at hand. Our goal was to see the extent to which the biggest Hungarian companies report their immaterial resources. The variable of the study was the disclosure activity of the business regarding the intangible items, which is determined by the number of intangible items in their financial statements.

Sample and methodology

The study was designed to examine the individual reports of the 30 largest companies (Figyelő Top 200, 2012) by net sales revenue for 2012. The individual financial statement of one of the 30 companies was not available on the government’s portal. The sample thus contained 29 individual financial statements, all of which were annual reports. Since business reports were publicly accessible (downloadable). The businesses included in the sample pursued activities in the following sectors:

• mining and quarrying: 1,
• manufacturing: 15,
• electricity and gas supply: 3,
• trade: 7,
• information and communication: 1,
• financial and insurance activities: 1,
• professional and scientific activities: 1.

We used the aforementioned index introduced by Ragini (2012) to measure the reporting intensity of intangible items. The scores achieved by the companies represent the number of intangible items included in the given financial statements, either because they are mandatory, or because the company reported them on a voluntary basis. The items were classified into the seven groups proposed by Ragini, and we did not use any weighting in determining the scores. We calculated the scores in percentages as well, as follows:

\[
\text{Score} = \frac{\text{number of intangible items in the given financial statements}}{\text{maximum number of items that can be presented (180)}} \times 100
\]

Hereinafter the scores assigned to the financial statements represent the values calculated with the latter method; i.e. the scores range between 0 and 100 per cent in each case.

Results

The arithmetic mean of the scores of the Hungarian companies included in the sample is 22.6. The values measured by Ragini for the business year of 2005 are as follows: India 21.47, USA 22.74, Japan 22.38. Obviously, the comparison is subject to limitations, as our own research was based on data pertaining to 2012, while the data for the other countries are from 2005. Accordingly, assuming that the trend established by Ragini continued, the average scores of the USA, Japan and India are expected to be even higher based on the 2012 financial statements (see Table 1). The highest value in the Hungarian sample is 53.89, while the lowest one is 9.44. Standard deviation is 11.64, which represents a relative variance of 51.5 compared to the mean. This rather high value suggests that the mean is not an adequate representation of the sample. Therefore, it is worth considering the median instead, which is 18.33, indicating that one half of the businesses has a higher and the other half has a lower score than this value. The highest values belong to the companies that also published a business report. In their case it can be established that they reported their intangible resources well over the average of the sample (see Chart 3).

There are no negative outliers; probably because the provisions of the Act on Accounting
define a minimum score to be met by all companies if they prepare the financial statements required by law. On the basis of the obligatory content of the supplementary notes, 26 intangible items must, in theory, be included in every case (unless they are irrelevant), which represents 14.44 points in percentage of the 180 potential items. When examining the sample, it can be seen that the lowest scores are mainly around 12–13. This suggests that the required items are generally relevant and are indeed included in the statements.

### Group-level calculations

Breaking down the items into groups enabled us to make additional analyses, which show which types of immaterial items are given more focus by the economic entities in their financial statements and which are the ones on which they disclose less information (see Chart 4). It is easier to judge the scores in each category if we take into account the distribution of the 26 items minimally required by the Act on Accounting for the

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>0–24%</th>
<th>25–49%</th>
<th>50–100%</th>
<th>(90–100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>n.a.</td>
<td>126</td>
<td>26</td>
<td>28</td>
<td>n.a</td>
</tr>
<tr>
<td>USA</td>
<td>n.a.</td>
<td>128</td>
<td>26</td>
<td>26</td>
<td>n.a</td>
</tr>
<tr>
<td>Japan</td>
<td>n.a.</td>
<td>115</td>
<td>38</td>
<td>27</td>
<td>n.a</td>
</tr>
<tr>
<td>Hungary</td>
<td>40</td>
<td>131</td>
<td>20</td>
<td>29</td>
<td>14</td>
</tr>
</tbody>
</table>

**Source:** Ragini (2012) and author’s own results

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**THE NUMBER OF ITEMS IN EACH GROUP**

**THE SCORES ACHIEVED BY INDIVIDUAL ECONOMIC ENTITIES**

Source: authors’ own editing
balance sheet and the supplementary notes among individual groups. The number of these elements is as follows:

1. environmental factors (10 items),
2. intellectual property, goodwill and other intangibles (9 items);
3. human resources (5 items),
4–5. R&D, market and consumer (1 item for each).
6–7. strategy and competition, corporate and ownership information (0 item).

When examining the group averages and the distribution of the values mentioned before, it becomes immediately obvious that the average scores achieved in each category produce almost the same ranking as the distribution of the required items. The only exception is the category of corporate and ownership information, where we can see a high score despite the lack of mandatory items. Next, we will analyse the results by group.

Hungarian companies received the lowest scores in the R&D category (average: 11.21). In the supplementary notes only R&D costs are presented mandatorily; they are included in the sample in 15 cases. Apart from this, the following items are relatively frequent (five or six entries): R&D activities, focus, financing, ongoing R&D projects. In the market and consumer groups the Hungarian average (14.37) lags far behind the corresponding value measured in the USA (24.23) in 2005. The most frequent items in this category include the following: geographical distribution (content required for the supplementary notes), main products and markets; marketing and advertisement costs. This group features an extremely large number of items in respect of

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**Chart 4**

**AVERAGE HUNGARIAN SCORES IN THE VARIOUS GROUPS AND RAGINI’S RESULTS FOR 2005 (USA)**

![Bar chart showing average Hungarian scores in various groups compared to Ragini’s results for 2005 (USA).]

*Source: Ragini (2012) and author’s own editing*
which neither company disclosed any information; for instance, the number of marketed products, brand value, marketing activities and consumer relations. The average value for items in the strategy and competition category is 18.28, which is close to the value measured in the USA. There are no obligatory items in this group, and there is no row for which at least half of the Hungarian companies provided information.

The average score (18.44) in the human resources category is also higher than the values received in the USA. Looking at the result more closely, we find that it can be practically attributed to the five mandatory items (staff number broken down by physical and intellectual workers, number of executive officers, their benefits and pension contributions). Very few financial statements mention the other 21 items of this category; thus the reports do not reveal much information about the human resources employed by the businesses (except for the economic entities whose business reports produced the outliers mentioned above).

We recorded an average of 29.79 for the intellectual property, goodwill and other intangibles group. This category is similar to the previous one in that the obligatory items received a very high score. The items are related to balance sheet intangibles; therefore, the information is readily available from the data of the accounting systems or the accounting policy (such as the value and items of intangible assets, their accounting treatment, depreciation method, useful life). On the other hand, we do not find nearly any information on topics like patents, the management of intellectual property and internal goodwill. The average for corporate and ownership information is 31.42, much higher than the mean in the US. The items in the category are actually composed of groups. Corporate data did not receive high scores in the reports of the Hungarian companies. They typically published the profile (activity) and the history of their company. In the vast majority of the cases items such as values, culture, vision, mission, philosophy and ethics did not score at all, which may be due to the fact that even if such information is provided, they are most likely to be presented in some other corporate reports or perhaps in the business report, rather than in the financial statements. In this group the high average score can be mainly attributed to the “ownership information” item; indeed, nearly all companies reported on several items that make up this category: main owners, number of owners, distribution of owners by type, number of shares possessed.

The Hungarian financial statements received the highest average value – 39.59 – in the category of environmental and other factors. This is probably because six of the items involved feature mandatorily prescribed content, which, for the most part, are presented as relevant items: commitments, matters and technologies related to the environment, off-balance items, transactions with affiliated companies and contingent liabilities.

CONCLUSIONS

We can establish overall, that the reporting practice of Hungarian economic entities in the sample regarding their intangible assets is largely determined by the rules laid down in the Act on Accounting. Data disclosed and published on a voluntary basis are typically provided by listed companies which also attached a business report to their financial statements (in their case, the financial statements contain far more items than the required minimum). Presumably, this is mainly due to the fact that there is no developed capital market in Hungary that
would serve as an incentive for economic entities from the financing side to publish information on knowledge assets. They are more typically financed by banks or, in the case of companies with foreign owners, by loans granted by their parent company. The companies that would like to attract foreign investors will nonetheless have to follow the trends that are typical of more developed capital markets (for example, in the case of green investment funds). At the same time, alternative reporting forms have made an appearance in Hungary as well, which can contribute to informing the stakeholders about soft immaterial factors through reports on corporate social responsibility. Some of the companies have already standardised these two forms of communication: they publish integrated reports that are suitable not only for fulfilling the goals of financial reporting but also for building the image of a socially responsible company.

Examining the group of intangible items, we found that the companies in the sample achieved lower scores than the aggregated average in the categories of R&D, market and consumer, strategy and competition and human resources. The reason for this may be that these categories represent the most competitive-intensive information, and these are the categories that are largely outside of the phenomena that can be described by traditional accounting methods (they may nevertheless qualify as suitable for inclusion in financial statements). Further investigations (e.g., interviews) can be used to confirm these findings and explain more precisely why certain topics are less represented in the financial statements.

Regulators have recently suggested reducing the accounting and reporting burdens on small and medium-sized companies and creating a reporting form better suiting these entities. This simplification resulted in eliminating the requirement for micro businesses to attach written supplementary notes to simplified financial statements. At the same time, companies should be given the opportunity to include written notes irrespective of their size, as the technical sections are not always suitable and sufficient for providing the stakeholders with a fair view of the economic entities. By changing the accounting rules, regulators could encourage companies to handle certain topics better and more consciously in the financial statements, because it can have a positive impact on their operations and competitiveness.

It is also worth considering that current regulations do not require the publication of the business report prepared with the financial statements in a manner that would ensure easy and quick access for stakeholders. Indeed, it is precisely the business report that could provide users of the reports with the most amount of information on the intangible factors and knowledge assets that are proclaimed to be so important these days.

Notes

1 This paper was written in the context of the tender entitled “Preparation of the sectors concerned for educational and R&D activities related to the Hungarian ELI project”, Project ID: TÁMOP-4.1.1.C-12/1/KONV-2012-0005.

2 Excluding economic entities that, pursuant to Regulation No. 1606/2002/EC, are required to prepare their consolidated statements in accordance with the IFRS standards accepted by the European Union. These firms must disclose their accounting report and business report on the company’s website.


Ván, H. (2014): A környezeti számvitel szerepe a vállalatok környezetvédelmi tevékenységében (The role of environmental accounting in the environmental activity of companies). University of Szeged, Faculty of Economics. JATEPress, Szeged
