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Introduction

These proceedings accompany the 4th **international scientific conference** entitled **IFRS: Global Rules & Local Use**, at Anglo-American University in Prague on September 29-30, 2016.

The proceedings contain contributions authored by conference participants, which were presented during the conference. Contributions have been reviewed and accepted by the conference editorial team and a group of external reviewers.

The program of the conference is as follows:

**Thursday – September 29th**

- Early registration, welcome session

**Friday – September 30th**

- Morning section I – Opening plenary session
  - Presentation of conference keynote speakers
  - (D. Alexander, A. Filip, J. Strouhal, A. Machová)

- Morning section II – Financial Reporting

- Afternoon section I – Country-level experience in IFRS adoption

- Afternoon section II – Ethics, CSR and standard implementation issues

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FINANCIAL REPORTING
IS COMPREHENSIVE INCOME COMPONENT REPORTING SUPERIOR? A FOCUS ON ANALYST REVISIONS AND REPORTING LOCATION

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Abstract
What is the best way to measure and report income? We exploit the requirement to include other comprehensive income (OCI) components in a Statement of Comprehensive Income (SoCI) under International Financial Reporting Standards from 2009 in Australia. We test whether a change in reporting location affects their value relevance and their use by financial analysts. Results show that comprehensive income is less value-relevant than net income, regardless of reporting location. In addition, changing the reporting location of OCI components to the SoCI provides no incremental improvement for stock value relevance.

Keywords: Comprehensive income, analyst revision, reporting location

JEL Classification: M40, M41, M48

1. INTRODUCTION

Income is a pre-eminent measure of a firm’s financial performance. In this paper we examine whether comprehensive income (CI) and individual other comprehensive income (OCI) components are value-relevant when reported in a Statement of Comprehensive Income (SoCI). A re-examination of income value relevance is important because of the substantial changes implemented by the IASB 2007 revision to International Accounting Standard (IAS) 1 Presentation of Financial Statements (Australian Accounting Standards Board (AASB) 101) that became effective from 1 January 2009. The major change was the creation of a SoCI that aggregated net income (NI) with OCI. That is, by adding together unrealised income with realised income from operations, the fundamental meaning of income changed.

We make two major contributions to the prevailing literature. First, we examine whether changing the reporting location of CI and individual OCI components, from the notes and an equity statement to SoCI, changed their value-relevance. Second, we examine whether financial analysts use individual OCI components to revise their forecasts, and whether changing the reporting location of OCI components impacts analyst use.

The results of this study are informative to financial statement users and we are motivated by the International Accounting Standards Board (IASB) call in July 2013, A Review of the Conceptual Framework for Financial Reporting (IASB, 2013a) for research papers that address whether International Financial Reporting Standards (IFRS) should retain the notion of OCI (IASB, 2013b). The IASB argues that OCI acts as a bridge between two income determination systems, fair value accounting and transaction-based historical cost accounting, and asks whether the OCI income measurement approach makes financial statements more useful.

We make three main contributions. First, we address the merits of reporting CI under IFRS. While the existing literature consistently finds that NI is a greater summary measure of firm performance than CI, the literature is mostly confined to non-IFRS countries. We address the IASB’s question of which OCI components should be reported by investigating the value relevance of four...
OCI components in Australia: securities held for resale (UNREAL), foreign exchange (FOREX), fixed asset revaluations (REVAL), and cash flow hedges (CFH).

Second, we provide evidence under IFRS of the importance of reporting location for income information. Specifically, we investigate whether changing the reporting location of CI and individual OCI components to the SoCI has an effect on their value-relevance to investors. Third, we extend the examination of OCI components to financial analysts as ‘expert’ financial report users. Our results fail to uncover any incremental value relevance for any component of users.

The paper is structured as follows. Section 2 presents the literature and develops the hypotheses, section 3 describes the data and research design, section 4 presents the results and section 5 summarises and discusses results.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 The introduction of the statement of comprehensive income under IFRS and the AASB

SoCI was formally introduced in Australia through the September 2007 amendment to AASB 101: Presentation of Financial Statements which became effective for periods beginning on or after 1 January 2009. The SoCI extends NI to create an additional income figure CI using OCI components (Eaton et al., 2013). The OCI components are essentially unrealised gains and losses, and include:

(a) Changes in revaluation surplus (see AASB 116 Property, Plant and Equipment and AASB 138 Intangible Assets) (‘REVAL’);
(b) Actuarial gains and losses on defined benefit plans (see AASB 119 Employee Benefits) (‘PEN’);
(c) Gains and losses arising from translating the financial statements of a foreign operation (see AASB 121 The Effects of Changes in Foreign Exchange Rates) (‘FOREX’);
(d) Gains and losses on remeasuring available-for-sale financial assets (see AASB 139 Financial Instruments: Recognition and Measurement) (‘UNREAL’); and
(e) The effective portion of gains and losses on hedging instruments in a cash flow hedge (see AASB 139) (‘CFH’).

The amended SoCI standard allows entities to present the SoCI in one of two formats: either in a single SoCI; or in two statements encompassing a separate income statement and a SoCI. As a result, the effective reporting location of OCI components changed from a Statement of Comprehensive Equity (SoCE) to the SoCI; reflecting a substantial shift in the approach used by both Australian Accounting Standards (AAS) and IFRS to define and measure income. Specifically, all changes in equity, other than owner-related transactions, are included in the measurement of clean surplus income (Henderson et al., 2011).

2.2 The value relevance of CI and its components

Although the components of OCI are effectively transitory and unrealised, the IASB argued in their 2008 discussion paper that the inclusion of OCI will make it easier for users to understand and make informed decisions because income now includes all “(price) relevant events” (IASB, 2008). The IASB continue to maintain this view, stating in the 2011 discussion paper, Presentation of Items of Other Comprehensive Income (Amendments to IAS 1), that items presented in profit or loss and OCI provide important information about a company’s financial performance (IASB, 2011). This view is directly supported by the American Accounting Association Financial Accounting Standards Committee (Linsmeier et al., 1997), and indirectly supported by conceptual accounting-based valuation models (e.g. Ohlson, 1995; Feltham and Ohlson, 1995).

In contrast, Chambers et al. (2007) propose that because OCI components derive from changes in interest rates, exchange rates and other random walk processes (Smithson et al. 1995), they most likely do not predict next period aggregate earnings and are irrelevant to forecasting. Nevertheless, Chambers et al. (2007) state that OCI components have the properties of transitory earnings as defined by Ohlson (1999), and are therefore a component of the book value of equity and affect value
on a dollar-for-dollar basis. That is, a dollar of OCI should result in a one dollar of return when markets are fully informed (Chambers et al. 2007).

2.3 The relative information content of CI and NI
Comparing CI to NI is economically important because income is used extensively as a summary measure of firm performance in many valuation and contracting contexts (Dhaliwal et al., 1999). In the United States the majority of literature finds that as a single earnings number, NI contains greater relative information content than CI (Cheng et al., 1993; Dhaliwal et al., 1999). In contrast, Biddle and Choi (2006) find that the definition of CI adopted by statement of financial accounting standards (SFAS) No. 130 Reporting Comprehensive Income (1997) (SFAS 130) dominates both NI and broad CI, thus providing evidence that CI provides incremental value relevance.

In non-United States settings prior CI studies are mixed. Using data from 16 European countries, Goncharov and Hodgson (2011) report that NI dominates CI as a summary measure of firm performance. Kabir and Laswad (2011) build upon Goncharov and Hodgson (2011) by testing the relative information content of CI under IFRS when it is reported in a SoCI. They also find that NI has greater explanatory power for stock returns than CI. Moreover, the domination of NI over aggregated CI is consistent for firms in both non-IFRS reporting countries (Cheng et al., 1993; Dhaliwal et al., 1999; Isidro et al., 2004; Wang et al., 2006; Jones and Smith, 2011) and in IFRS reporting countries (Kabir and Laswad, 2011; Devalle et al., 2010; Goncharov and Hodgson, 2011).

Rees and Shane (2012) postulate that the underperformance of CI is caused by the aggregation of individual OCI components, each of which have very different implications for firm value and future cash flows. Furthermore, aggregated CI contains a mixture of transitory and persistent earnings components (Lipe, 1986; Collins and Kothari, 1989; Ramakrishnan and Thomas, 1998; Liu and Thomas, 2000). The above research suggests that because the underlying measurement of CI does not change with the introduction of the SoCI, aggregated CI will not have greater relative information content than NI. This leads to a first hypothesis:

**H1**: Under the IFRS amendments aggregated CI has less information content than NI.

2.4 The incremental information content of OCI components
In the United States, Dhaliwal et al. (1999) found that only changes in UNREAL (securities held for resale) improve income’s association with stock returns, with financial firms driving the result. Biddle and Choi (2006) also find that changes in UNREAL, FOREX (foreign exchange) and PEN (pensions) are positively associated with stock returns. Post-SFAS 130, Chambers et al. (2007) find that both UNREAL and FOREX have significant positive associations with stock returns. In other country settings, Kanagaretnam et al. (2009) find that UNREAL and CFH (cash flow hedges) have significant positive and negative associations respectively with market prices and returns. Finally, Hodgson and Russell (2014) provide an overview of the research results and report that overwhelmingly financial securities held for resale is the only component that consistently provides incremental value relevance. There is no consensus on the associations between FOREX, REVAL (fixed asset revaluations) and stock returns. Furthermore, only Kanagaretnam et al. (2009) find that CFH (cash flow hedges) are associated with stock returns but they caution that the results may not be generalizable.

2.5 The importance of CI and OCI component reporting location
One innovation is that we test on location for CI and OCI; whether the reporting location of income components differentially affect stock value. Researchers assert that changing OCI reporting location reduces the cognitive costs of data processing and renders information more useful (Hirst and Hopkins, 1998), or strengthens perceptions of importance and usefulness (Sanbonmatsu et al., 1997; Maines and McDaniel, 2000).

In the United States, Hirst and Hopkins (1998) conclude that reporting OCI components in a SoCI, rather than a SoCE, enhances their transparency, and increases analysts’ ability to process information, detect earnings management and assess the quality of NI. In contrast, Cahan et al. (2000)
report no difference in the value relevance of FOREX and REVAL when reported in the notes versus the SoCE. More recently, Schaberl and Victoriaevich (2015) report a decline in value-relevance of OCI for firms changing the reporting location of OCI from a statement of equity to a performance statement. Taking a lead from the psychology of importance perception we state two further hypotheses:

**H2:** Reporting aggregate CI in the SoCI, rather than in the notes or SoCE, increases the value-relevance of CI.

**H3:** Reporting individual OCI components in the SoCI, rather than in the notes or SoCE increases the value-relevance of OCI components.

### 2.6 Analysts’ use of OCI components in revising forecasts

Our next contribution is to focus on informed market participants, stock analysts. This is motivated by the complexity of adding together realised and unrealised income components, and previous research that postulates the value relevance of comprehensive income components may depend on investors’ ability to process complex information (Sloan, 1996; Goncharov and Hodgson, 2011). Given the complexity associated with these issues, it is surprising that few research articles have reverted to an analysis of the reactions of market actors with greater financial expertise and experience.

In one of the few studies in the area, Hirst and Hopkins (1998) reported that displaying CI components made earnings management more transparent for buy side equity analysts. However, this study was limited to hypothetical data. Post-SFAS 130, Choi and Zang (2006) find that reported UNREAL and PEN were significantly associated with analysts forecast revisions of earnings per share (EPS). Finally, Goncharov and Hodgson (2011) report that financial analysts did update their stock price forecasts for UNREAL, REVAL and aggregate OCI reported in the notes or in SoCE. Overall, past studies provide very limited evidence on analyst assessment of the reporting location of OCI components. We update and extend this research with the following hypothesis:

**H4:** Analysts use individual OCI components to revise EPS forecasts.

### 3. DATA AND RESEARCH METHODS

#### 3.1 Dataset

The data sample consists of all Australian Securities Exchange (‘ASX’) listed firms listed for the entire sample period of 2006 to 2008 and 2010 to 2012. The year 2009 was excluded because it contains firms that were not yet required to report a SoCI because of a different financial-end-of-year. Price data was collected from Datastream, accounting data was collected from both Worldscope and Datastream and financial statement release dates were collected from Morningstar DatAnalysis Premium. Analyst individual forecasts were obtained from the Thomson Reuter I/B/E/S Detail History file.

Observations with missing data and illiquid firm-year observations were eliminated using two criteria. First, 999 firm-year observations with less than 120 days of valid returns were excluded. Second, the Amivest measure of liquidity ($LR_{it}$) was employed to determine whether the remaining firms were thinly traded in a particular financial year. The liquidity ratio measures trading volume associated with an absolute unit change in stock price, with a higher ratio implying greater market liquidity or depth (Amihud et al., 1997):

$$LR_{it} = \frac{\sum_t V_{i,j,t}}{\sum_t |R_{i,j,t}|}$$

where $LR_{it}$ is the liquidity ratio of firm $i$ in financial year $t$, $V_{i,j,t}$ and $R_{i,j,t}$ are, respectively, the volume and return on stock $i$ on day $j$ in financial year $t$, with the summation representing the days in the financial year $t$ (Cooper et al. 1985; Khan and Baker, 1993). Liquidity ratios in the bottom ten percentile (n=320) were classified as illiquid stocks in that year and eliminated (Datar et al., 1998).
Finally, observations that did not report any OCI components were removed (Biddle and Choi, 2006; Choi and Zang, 2006; Kanagaretnam et al., 2009; Goncharov and Hodgson, 2011). The remaining data sample included all firm-year observations with at least one reported OCI component with a non-zero amount in the current financial year \((t)\). The full sample consisted of 1, 635 firm-year observations for 407 unique firms. A sample breakdown according to year, industry and OCI components (reporting non-zero amounts) is provided in Table 1.

Table 1. Breakdown of full sample according to industry, financial year and individual OCI component

The table below presents a breakdown of the full sample (\(n=1,635\) firm-year observations) according to industry, financial year and individual OCI components that have a non-zero amount reported. Panel A provides a breakdown by financial year, Panel B provides a breakdown by industry, and Panel C provides a breakdown by individual OCI components.

Panel A: Breakdown by Financial Year

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of obs.</th>
<th>% of obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>232</td>
<td>14.19</td>
</tr>
<tr>
<td>2007</td>
<td>274</td>
<td>16.76</td>
</tr>
<tr>
<td>2008</td>
<td>279</td>
<td>17.06</td>
</tr>
<tr>
<td>2010</td>
<td>286</td>
<td>17.49</td>
</tr>
<tr>
<td>2011</td>
<td>285</td>
<td>17.43</td>
</tr>
<tr>
<td>2012</td>
<td>279</td>
<td>17.00</td>
</tr>
</tbody>
</table>

Panel B: Breakdown by Industry

<table>
<thead>
<tr>
<th>Industry Code</th>
<th>No. of obs.</th>
<th>% of obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001 Oil and Gas</td>
<td>113</td>
<td>6.91</td>
</tr>
<tr>
<td>1000 Basic Materials</td>
<td>258</td>
<td>15.78</td>
</tr>
<tr>
<td>2000 Industrials</td>
<td>313</td>
<td>19.14</td>
</tr>
<tr>
<td>3000 Consumer Goods</td>
<td>132</td>
<td>8.07</td>
</tr>
<tr>
<td>4000 Health Care</td>
<td>105</td>
<td>6.4</td>
</tr>
<tr>
<td>5000 Consumer Services</td>
<td>233</td>
<td>14.25</td>
</tr>
<tr>
<td>6000 Telecommunications</td>
<td>26</td>
<td>1.59</td>
</tr>
<tr>
<td>7000 Utilities</td>
<td>47</td>
<td>2.87</td>
</tr>
<tr>
<td>8000 Financials</td>
<td>320</td>
<td>19.57</td>
</tr>
<tr>
<td>9000 Technology</td>
<td>88</td>
<td>5.38</td>
</tr>
</tbody>
</table>

Panel C: Breakdown by Individual OCI Component (Reporting Non-Zero Amounts)

<table>
<thead>
<tr>
<th>Component</th>
<th>No. of obs.</th>
<th>% of obs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNREAL</td>
<td>442</td>
<td>27.03</td>
</tr>
<tr>
<td>FOREX</td>
<td>1,497</td>
<td>91.52</td>
</tr>
<tr>
<td>REVAL</td>
<td>288</td>
<td>17.61</td>
</tr>
<tr>
<td>CFH</td>
<td>875</td>
<td>53.52</td>
</tr>
</tbody>
</table>

Industries are defined as follows: 0001 is Oil and Gas; 1000 is Basic Materials; 2000 is Industrials; 3000 is Consumer Goods; 4000 is Health Care; 5000 is Consumer Services; 6000 is Telecommunications; 7000 is Utilities; 8000 is Financials; and 9000 is Technology. Individual OCI components are defined as follows: UNREAL is gains and losses on remeasuring available-for-sale financial assets; FOREX is gains and losses arising from translating the financial statements of a foreign operation; REVAL is changes in the revaluation surplus; and CFH is the effective portion of gains and losses on hedging instruments in a cash flow hedge.

The second non-zero subsample included only observations for firms that report at least one identical OCI component with a non-zero amount in financial year \((t)\) in both the pre-SoCI and SoCI periods. The non-zero samples for UNREAL, FOREX, REVAL and CFH contain 296, 1,261, 174 and 721 firm-year observations for 65, 241, 38 and 140 unique firms respectively. Table 2 summaries the sample selection process used for, and size of, each sample.

Table 2. Sample selection process

<table>
<thead>
<tr>
<th>Sampling Filter</th>
<th>Number of Firm-year Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>After deletion of firm-year observations outside of sample period</td>
<td>6,734</td>
</tr>
<tr>
<td>After deletion of firm-year observations with a missing stock ticker</td>
<td>6,693</td>
</tr>
<tr>
<td>After deletion of firm-year observations with missing values for net income, total assets, total liabilities, number of outstanding shares, lagged market value of equity and lagged market-to-book-value ratio</td>
<td>5,912</td>
</tr>
<tr>
<td>After deletion of firm-year observations with missing price data</td>
<td>4,365</td>
</tr>
<tr>
<td>After deletion of firm-year observations with negative shareholders’ equity</td>
<td>4,199</td>
</tr>
<tr>
<td>After deletion of firm-year observations with less than 120 trading days with valid returns</td>
<td>3,200</td>
</tr>
<tr>
<td>After deletion of year observations for firms that are infrequently traded</td>
<td>2,880</td>
</tr>
<tr>
<td>After deletion of firm-year observations with missing annual financial statement release dates in Morningstar DatAnalysis</td>
<td>2,217</td>
</tr>
<tr>
<td>After deletion of firm-year observations with no reported OCI items with a non-zero amount in the current year ((t))</td>
<td>1,635</td>
</tr>
<tr>
<td>Full sample</td>
<td>1,635</td>
</tr>
<tr>
<td>UNREAL non-zero sample</td>
<td>296</td>
</tr>
<tr>
<td>FOREX non-zero sample</td>
<td>1,261</td>
</tr>
<tr>
<td>REVAL non-zero sample</td>
<td>174</td>
</tr>
<tr>
<td>CFH non-zero sample</td>
<td>721</td>
</tr>
<tr>
<td>Analyst full sample</td>
<td>904</td>
</tr>
</tbody>
</table>
3.2 Analyst revisions
EPS forecasts are made within 90 days prior to the date of the financial statements release \(t\) (during the ‘pre-announcement period’) or within 90 days after release \(t\) (during the ‘post-announcement period’). To be included in the analyst sample, the firm-year observation must have at least one forecast made for EPS in both the pre- and post-announcement periods by the same analyst. The full analyst sample contains 904 firm-year observations for 286 unique firms.

3.3 Income data
For firms with unreported CI and OCI components as-if measures are calculated (Dhaliwal et al., 1999; Goncharov and Hodgson, 2011). Prior studies document that as-if and as-reported measures of OCI items are highly correlated (Dhaliwal et al., 1999; Jones and Smith, 2011). CI is calculated as follows:

\[
CI_{it} = \Delta BV + DIV_{it} - NETCAP_{it}
\]

Where:
- \(\Delta BV\) = the change in book value of equity (change in total assets WC02999 less the change in total liabilities WC03351);
- \(DIV_{it}\) = dividends paid (WC04551);
- \(NETCAP_{it}\) = net capital contributions (WC04251 less WC04751).

\[
UNREAL_{it} = \text{the change in unrealized security gains and losses reported directly in equity (change in Worldscope item WC03498) for firm } i \text{ from financial year } t-1 \text{ to } t;
\]

\[
FOREX_{it} = \text{the change in the foreign currency translation reserve reported in equity (change in WC03497) for firm } i \text{ from financial year } t-1 \text{ to } t;
\]

\[
REVAL_{it} = \text{the change in the revaluation surplus reported in equity (change in WC03492) for firm } i \text{ from financial year } t-1 \text{ to } t; \text{ and}
\]

\[
CFH_{it} = \text{the change in the cash flow hedge reserve reported in equity (change in WC15582) for firm } i \text{ from financial year } t-1 \text{ to } t.
\]

The individual OCI components are calculated on an after-tax basis, and the OCI component ‘actuarial gains and losses on defined benefit plans’ could not be estimated from the available data.

3.4 Research methods
Following Biddle and Choi (2006), Chambers et al. (2007), Kanagaretnam et al. (2009), Goncharov and Hodgson (2011) and Kubota et al. (2011), we apply a return-based association model to test the incremental information content of CI and OCI components. The dependent variable is \(RET_{it}\), the cum-dividend raw stock return for firm \(i\) measured over a year period ending two days after the release of the annual financial statements for financial year \(t\). We add industry controls using 2-digit (industry level) Industry Classification Benchmark (ICB) in Worldscope, and we apply standard errors cluster techniques (Peterson, 2009).

Comparing CI and NI. The following ordinary least squares (OLS) models are used to examine the information content of CI and NI:

\[
RET_{it} = \beta_0 + \beta_1 NI_{it} + \beta_2 LOSS + \beta_3 SIZE_{it-1} + \beta_4 BM_{it-1} + \sum_{k=1}^{9} \beta_{(5+k)} INDUSTRY_i^k + \epsilon_{it} \tag{1}
\]

\[
RET_{it} = \beta_0 + \beta_14 CI_{it} + \beta_14 LOSS + \beta_15 SIZE_{it-1} + \beta_16 BM_{it-1} + \sum_{k=1}^{9} \beta_{(17+k)} INDUSTRY_i^k + \epsilon_{it} \tag{2}
\]

Where:
- \(RET_{it}\) = the cum-dividend raw stock returns for firm \(i\) measured over a year period ending two days after the release of the annual financial statements for financial year \(t\);
- \(NI_{it}\) = the as-reported net income for firm \(i\) for financial year \(t\);
- \(CI_{it}\) = the as-if comprehensive income for firm \(i\) for financial year \(t\);
- \(LOSS\) = an indicator variable equal to one if \(NI_{it}\) is negative, and zero otherwise.

Loss controls for the differential valuation of negative earnings (Hayn, 1995);
\[
\text{SIZE}_{it-1} = \text{the natural logarithm of market capitalisation for firm } i \text{ at the beginning of financial year } t;
\]
\[
\text{BM}_{it-1} = \text{the ratio of market value of equity to book value of equity for firm } i \text{ at the beginning of financial year } t.
\]
\[
\text{INDUSTRY}_{it}^k = \text{an indicator variable equal to one if the firm-year observation belongs to industry } k, \text{ and zero otherwise.}
\]

Following Chambers et al. (2007), all income variables are scaled by the market value of equity at the beginning of financial year \(t\). Further, we examine whether reporting CI in the SoCI, rather than in the notes or SoCE, is associated with returns:

\[
\begin{align*}
\text{RET}_{it} &= \beta_0 + \beta_{26}\text{CI}_{it} + \beta_{27}\text{CI}_{it}x\text{SOCI} + \beta_{28}\text{LOSS}_{it} + \beta_{29}\text{SIZE}_{it-1} + \beta_{30}\text{BM}_{it-1} + \beta_{31}\text{SOCI} \\
&+ \sum_{k=1}^{9} \beta_{(32+k)}\text{INDUSTRY}_{it}^k + \epsilon_{it}
\end{align*}
\]

Where:
\[
\text{SOCI} = \text{an indicator variable equal to one if the firm-year observation falls in the SoCI period.}
\]

We test whether CI has significantly greater information content than NI by performing a one-tail test of whether the adjusted \(R^2\) of model (2) is statistically greater than that of model (1). In addition, Vuong tests are used to compare the explanatory power of CI and NI in estimating returns (Vuong, 1989; Dechow, 1996).

**Examining OCI components.** To examine the incremental information content of OCI components and whether their information content changed with the introduction of SoCI, we apply the following model:

\[
\begin{align*}
\text{RET}_{it} &= \beta_0 + \alpha_1\text{NI}_{it} + \alpha_2\text{LOSS} + \alpha_3\text{SOCI} + \alpha_4\text{UNREAL}_{it} + \alpha_5(\text{UNREAL}_{it}x\text{SOCI}) + \alpha_6\text{FOREX}_{it} \\
&+ \alpha_7(\text{FOREX}_{it}x\text{SOCI}) + \alpha_8\text{REVAL}_{it} + \alpha_9(\text{REVAL}_{it}x\text{SOCI}) + \alpha_{10}\text{CFH}_{it} \\
&+ \alpha_{11}(\text{CFH}_{it}x\text{SOCI}) + \alpha_{12}\text{SIZE}_{it-1} + \alpha_{13}\text{BM}_{it-1} + \sum_{k=1}^{10} \beta_{(14+k)}\text{INDUSTRY}_{it}^k + \epsilon_{it}
\end{align*}
\]

\[
\begin{align*}
\text{RET}_{it}, \text{NI}_{it}, \text{LOSS}_{it}, \text{UNREAL}_{it}, \text{FOREX}_{it}, \text{REVAL}_{it}, \text{CFH}_{it}, \text{SOCl}_{it}, \text{SIZE}_{it-1}, \text{BM}_{it-1} \text{ and INDUSTRY}_{it}^k \text{ are as previously defined. As with models 1 and 2, all income variables are scaled by the market value of equity at the beginning of financial year } t. \text{ To control for a change in the firms who report OCI in the pre-SoCI and SoCI periods, we also test the incremental information content of individual OCI components using the non-zero samples for each OCI item:}
\end{align*}
\]

\[
\begin{align*}
\text{RET}_{it} &= \beta_0 + \alpha_1\text{NI}_{it} + \alpha_2\text{LOSS} + \alpha_3\text{SOCI} + \alpha_4\text{OCI}_{it} + \alpha_5(\text{OCI}_{it}x\text{SOCI}) + \alpha_6\text{SIZE}_{it-1} + \alpha_{13}\text{BM}_{it-1} \\
&+ \sum_{k=1}^{9} \beta_{(14+k)}\text{INDUSTRY}_{it}^k + \epsilon_{it}
\end{align*}
\]

where OCI is the OCI component: UNREAL, FOREX, REVAL, CFH.

The incremental information content of OCI components in the SoCI period are tested by adding the coefficients for the OCI and interaction variables and by performing a Wald test to determine whether the sum of coefficients is statistically different from zero.

**Examining analysts’ forecasts.** We test the association between the release of a firm’s individual OCI components and revisions in its analyst consensus forecast EPS (Choi and Zang, 2006) surrounding the release of financial statements.

To calculate the change in consensus forecasts, the last (first) EPS forecast made by a specific analyst in the pre-announcement period (post-announcement period) is used. The first EPS forecast made post-announcement by individual analysts is used to provide comfort that the annual financial statements are the primary information release that the forecast has been revised for (Choi and Zang, 2006; Goncharov and Hodgson, 2011). The consensus forecast in each period is the mean of the individual analyst forecasts. **Analysts’ Forecast Revision (FREV)** is then calculated as the change in consensus EPS forecast from the 90 day pre-announcement period to the 90 day post-announcement period, scaled by the price per share at the beginning of the financial year \(P_{it-1}\), as follows:

\[
\text{FREV} = \frac{(Post \ consensus \ forecast - Pre \ consensus \ forecast)}{P_{it-1}}
\]

We then add OCI/SoCI interaction variables as follows:
\[
FREV_{it} = \beta_0 + \alpha_1 FE_{it} + \alpha_2 LOSS + \alpha_3 SOCI + \alpha_4 UNREAL_{it} + \alpha_5 (UNREAL_{it} \times SOCI) + \alpha_6 FOREX_{it} + \alpha_7 (FOREX_{it} \times SOCI) + \alpha_8 (REVAL_{it} \times SOCI) + \alpha_9 CFH_{it} + \alpha_{10} (CFH_{it} \times SOCI) + \alpha_{11} SIZE_{it-1} + \alpha_{12} BM_{it-1} + \alpha_{13} ACHERN_{it} + \alpha_{14} NUM_{it} + \sum_{k=1}^{9} \beta_{(16+k)} INDUSTRY{k} + \varepsilon_{it}
\]

The following control variables are added:

\[
FE_{it} = \frac{(Actual \, EPS - Mean \, analysts' \, forecasts \, for \, year \, t \, EPS)}{P_{i,t-1}}
\]

\[
LOSS = \text{variable as previously defined. Prior studies show that analysts’ find forecasting more difficult for loss firms (Lang and Lundholm, 1996; Brown et al. 1999). Therefore, it is expected that loss firms have larger revisions to forecasts.}
\]

\[
SIZE_{it-1} = \text{the natural log of firm } i \text{'s market capitalisation at the beginning of financial year } t, \text{ because forecast accuracy is a function of firm size and information disclosure (Lang and}
\]

\[
BM_{it-1} = \text{the ratio of market value of equity to book value of equity for firm } i \text{ at the beginning of financial year } t \text{ proxies for growth factors and intangibles which influence analyst forecasts (Choi and Zang, 2006; Goncharov and Hodgson, 2011);}
\]

\[
ACHERN_{it} = \text{the absolute value of the difference between firm } i \text{'s current year’s actual EPS and last year’s EPS, deflated by the firm } i \text{'s share price at the beginning of financial year } t. \text{Analysts find forecasting more difficult for firm’s with relatively larger changes in earnings (Lang and}
\]

\[
NUM_{it} = \text{the number of analyst forecasts in calculation of the consensus forecast for EPS}_{i,t+1}. \text{Analyst following is positively associated with forecast accuracy as it reflects disclosure levels and competition among analysts (Lang and Lundholm, 1996; Hope, 2003; Choi and Zang, 2006).}
\]

\[
INDUSTRY{i} = \text{an indicator variable equal to one if firm } i \text{ belongs to industry } k, \text{ because industry membership may be a significant factor in analyst forecasts.}
\]

**Descriptive Statistics.** Table 3 Panel A presents descriptive statistics. All variables except indicator variables (LOSS, SOCI and INDUSTRY) are winsorised at the 1% and 99% percentiles. Consistent with prior CI research, RET and all of the income variables, except for REVAL, are negatively skewed (Kanagaretnam et al., 1999; Jones and Smith, 2011; Goncharov and Hodgson, 2011). Furthermore, except for SIZE, the standard deviation of variables are high relative to their mean.

RET has a mean (median) of -0.0331% (0.0198%), somewhat influenced by negative returns in the financial crisis years. The mean (median) value of net income (NI) is 0.71% (5.74%) being scaled by lagged market value of equity (‘MVE’). This sample predominantly consists of profit firms (75.6% of firm-year observations). The mean of CI is 2.66% and is greater than NI reflecting OCI gains rather than losses.

The mean of individual OCI components is very close to 0.00% of lagged MVE which is consistent with unrealised gains and losses arising from random walk processes (Chambers et al. 2007). Of the OCI components, REVAL has the highest value, and FOREX is the most frequently reported with the lowest value. Gains were reported on average for FOREX, REVAL and CFH in the pre-SoCI period, but on average losses were reported for these components in the SoCI period.

Panel B of Table 3 presents the Pearson correlation matrix. Each income variable, with the exception of UNREAL, has a significant positive correlation with RET. NI has a higher correlation with RET than CI and each OCI component. Furthermore, the individual OCI components are generally uncorrelated with each other with the exception of FOREX and CFH. Variance inflation factors indicate that multicollinearity between the variables is not an issue.
Table 3. Descriptive statistics (full sample)

This table presents descriptive statistics and Pearson correlations for the variables contained in the full sample (n=1,635 firm-year observations). Panel A reports the mean, median, standard deviation (Std. Dev.) and percentage of firm-year observations that report a non-zero amount (% non-zero). The last three columns report the mean value for each OCI component, as a percentage of NI, for the firm-year observations that report a non-zero amount for that respective OCI component in the pooled, pre-SoCI, and SoCI periods. Panel B presents Pearson correlations of each of variables included in the full sample.

Panel A: Descriptive Statistics (Full Sample; n=1,635 firm-year observations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>% non-zero</th>
<th>Pooled mean when non-zero (% of NI)</th>
<th>Pre-SoCI period mean when non-zero (% of NI)</th>
<th>SoCI period mean when non-zero (% of NI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RET</td>
<td>-0.0331</td>
<td>0.0198</td>
<td>0.4944</td>
<td>100</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>NI</td>
<td>0.0071</td>
<td>0.0574</td>
<td>0.2162</td>
<td>100</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>CI</td>
<td>0.0266</td>
<td>0.0597</td>
<td>0.2278</td>
<td>100</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>UNREAL</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0086</td>
<td>27.03</td>
<td>-0.1345</td>
<td>-0.1904</td>
<td>-0.0849</td>
</tr>
<tr>
<td>FOREX</td>
<td>-0.0026</td>
<td>0.0000</td>
<td>0.0330</td>
<td>91.56</td>
<td>-0.0182</td>
<td>0.0375</td>
<td>-0.0680</td>
</tr>
<tr>
<td>REVAL</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0095</td>
<td>17.61</td>
<td>0.2350</td>
<td>0.4349</td>
<td>-0.0932</td>
</tr>
<tr>
<td>CFH</td>
<td>-0.0008</td>
<td>0.0000</td>
<td>0.0134</td>
<td>53.52</td>
<td>0.0231</td>
<td>0.0921</td>
<td>-0.0339</td>
</tr>
<tr>
<td>SIZEit-1</td>
<td>20.2545</td>
<td>20.0458</td>
<td>1.7651</td>
<td>100</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>BMi-1</td>
<td>2.8140</td>
<td>1.8300</td>
<td>2.8300</td>
<td>100</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Panel B: Pearson Correlation Matrix (Full Sample; n=1,635 firm-year observations)

<table>
<thead>
<tr>
<th>Variable</th>
<th>RET</th>
<th>NI</th>
<th>CI</th>
<th>LOSS</th>
<th>SOCI</th>
<th>UNREAL</th>
<th>FOREX</th>
<th>REVAL</th>
<th>CFH</th>
<th>SIZEit-1</th>
<th>BMi-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>RET</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>*** 0.4347</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>*** 0.3784</td>
<td>*** 0.7847</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOSS</td>
<td>*** -0.3750</td>
<td>*** -0.6509</td>
<td>*** -0.5509</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI</td>
<td>** 0.0548</td>
<td>0.0246</td>
<td>-0.0150</td>
<td>* -0.0468</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNREAL</td>
<td>0.0098</td>
<td>0.0135</td>
<td>** 0.0627</td>
<td>0.0150</td>
<td>-0.0003</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOREX</td>
<td>0.0076</td>
<td>0.0106</td>
<td>*** 0.1343</td>
<td>-0.0158</td>
<td>0.0273</td>
<td>0.0200</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REVAL</td>
<td>** 0.0545</td>
<td>0.0349</td>
<td>*** 0.1440</td>
<td>* -0.0475</td>
<td>-0.0217</td>
<td>* -0.0424</td>
<td>-0.0033</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFH</td>
<td>*** 0.0999</td>
<td>** 0.0485</td>
<td>*** 0.1131</td>
<td>-0.0233</td>
<td>*** 0.0897</td>
<td>-0.0025</td>
<td>*** 0.4186</td>
<td>0.0254</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZEit-1</td>
<td>*** 0.1668</td>
<td>*** 0.2284</td>
<td>*** 0.1604</td>
<td>*** -0.3176</td>
<td>0.0253</td>
<td>0.0142</td>
<td>0.0350</td>
<td>-0.0134</td>
<td>-0.0089</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>BMi-1</td>
<td>*** 0.2268</td>
<td>*** 0.1166</td>
<td>*** 0.1357</td>
<td>*** -0.1029</td>
<td>*** -0.2211</td>
<td>0.0191</td>
<td>*** 0.0504</td>
<td>* 0.0430</td>
<td>0.0303</td>
<td>*** 0.1338</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

***, **, and * denote statistical significance at the 1%, 5% and 10% levels respectively.

Variables are defined as follows: RET is the cum-dividend raw stock returns for firm i measured over a year period ending two days after the release of the annual financial statements for financial year t; NI is the reported net income for firm i for financial year t; CI is the comprehensive income for firm i for financial year t (as defined in Section 3.3); LOSS is an indicator variable equal to one if NI is negative, and zero otherwise; SOCI is an indicator variable equal to one if the firm-year observation falls in the SoCI period; UNREAL is gains and losses on remeasuring available-for-sale financial assets for firm i in financial year t, measured as the change in unrealized security gains and losses reported directly in equity (change in Worldscope item WC03498) from financial year t-1 to t; FOREX is gains and losses arising from translating the financial statements of a foreign operation for firm i in financial year t, measured as the change in the foreign currency translation reserve reported in equity (change in WC03497) from financial year t-1 to t; REVAL is the revaluation surplus for firm i in financial year t, measured as the change in the revaluation surplus reserve reported in equity (change in WC03492) from financial year t-1 to t; CFH is the effective portion of gains and losses on hedging instruments in a cash flow hedge for firm i in financial year t, measured as the change in the cash flow hedge reserve reported in equity (change in WC15582) from financial period t-1 to t; SIZEit is the natural log of the firm’s market capitalisation at the beginning of financial year t; and BMi is the ratio of market value of equity to book value of equity for firm i at the beginning of financial year t. All income components are scaled by the firm’s market value of equity at the beginning of financial year t.
4. RESULTS

4.1 Relative information content of aggregated CI
Table 4 presents the results for hypothesis 1. For both the pre and post SoCI samples, the coefficients of NI are larger than those of CI and the adjusted-\(R^2\) of the NI model(s) are marginally larger than those of CI models. For both samples the Vuong statistics are negative and significant. Hence, aggregated CI has significantly less explanatory power for stock returns than NI when reported in the SoCI period, consistent with the IFRS research literature (Goncharov and Hodgson, 2011; Kabir and Laswad, 2011; Rees and Shane, 2012).

Table 4 also presents the results of tests on hypothesis 2; whether the introduction of SoCI had an impact on the association between CI and stock returns. In model (3) the CI-SoCI interaction term is insignificant (-0.0648), rejecting the behaviour theory in hypothesis 2 that changing the reporting location of CI to the SoCI had a positive effect on its value relevance.

Table 4. Association of yearly stock returns with net income and comprehensive income

The table presents the coefficients from the ordinary least squares regressions. The full sample (n=1635 firm-year observations) is partitioned into: (a) firm-year observations pre-SoCI (n=785 firm-year observations), and (b) firm-year observations in the SoCI period (n=850 firm-year observations). Models (1) and (2) are run on pre-SoCI sub-sample and SoCI sub-sample. Model 3 is run on the pooled full sample. The dependant variable for each model, RET, is the cum-dividend raw stock returns for firm \(i\) measured over a year period ending two days after the release of the annual financial statements for financial year \(t\).

<table>
<thead>
<tr>
<th>Sample</th>
<th>Predicted</th>
<th>Direction</th>
<th>(1) PreSoC</th>
<th>(2) PreSoC</th>
<th>Model (1) SoCI</th>
<th>(2) SoCI</th>
<th>(3) Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.3883</td>
<td>**-0.4900</td>
<td>-0.0681</td>
<td>-0.0904</td>
<td>**-0.3432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>+</td>
<td>*0.7457</td>
<td>---</td>
<td>*0.6912</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>+</td>
<td>---</td>
<td>*0.4864</td>
<td>---</td>
<td>*0.5529</td>
<td>*0.5402</td>
<td></td>
</tr>
<tr>
<td>CI x SOCI</td>
<td>?</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-0.0648</td>
</tr>
<tr>
<td>LOSS</td>
<td>-</td>
<td>*0.2020</td>
<td>*0.3063</td>
<td>*0.1324</td>
<td>*0.1853</td>
<td>*0.2562</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td></td>
<td>0.0139</td>
<td>**0.0201</td>
<td>-0.0001</td>
<td>-0.0028</td>
<td>0.0011</td>
<td></td>
</tr>
<tr>
<td>BM</td>
<td>+</td>
<td>*0.0332</td>
<td>*0.0325</td>
<td>*0.0330</td>
<td>*0.0317</td>
<td>0.00335</td>
<td></td>
</tr>
<tr>
<td>SOCI</td>
<td>?</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>*0.0907</td>
</tr>
</tbody>
</table>

Industry Controls: Yes, Z-Test: Yes, Yes, Yes, Yes, Yes, Yes, Yes, ---. Adjusted R^2: 0.2524, 0.2325, 0.2493, 0.2345, 0.2271. F-Statistic: ***15.80, ***17.22, ***23.43, ***17.80, ***27.95, ***27.95, ***27.95, ---.

\[ \text{RET}_{it} = \beta_0 + \beta_1 NI_{it} + \beta_2 LOSS + \beta_3 SIZE_{it-1} + \beta_4 BM_{it-1} + \sum_{k=1}^{9} \beta_{(5+k)} INDUSTRY^k_{i} + \epsilon_{it} \]

\[ \text{RET}_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 LOSS + \beta_3 SIZE_{it-1} + \beta_4 BM_{it-1} + \sum_{k=1}^{9} \beta_{(10+k)} INDUSTRY^k_{i} + \epsilon_{it} \]

\[ \text{RET}_{it} = \beta_0 + \beta_1 CI_{it} + \beta_2 LOSS + \beta_3 SIZE_{it} + \beta_4 BM_{it} + \sum_{k=1}^{9} \beta_{(20+k)} INDUSTRY^k_{i} + \epsilon_{it} \]

***, **, and * denote statistical significance at the 1%, 5% and 10% levels respectively. The parentheses contain the t-statistics based on heteroscedasticity-adjusted standard errors clustered by firm. The parentheses for the F-statistics of each model contain p-values. The Z-test reports the value of the Vuong statistic, comparing the explanatory power of a model with the explanatory power of the base model (Model (1b) or (2a)). Variables NI, CI, SOCI, LOSS, SIZE, BM are as defined earlier. Nine indicator variables based on industry are included in each model as controls.
4.2 Incremental information content of individual OCI components

Table 5 presents the results on the association between individual OCI components and the returns model (4). The coefficients on REVAL, FOREX and UNREAL are statistically insignificant. Consistent with prior research, REVAL is not value relevant for the general investor because it represents a fixed operating asset that needs to be replaced in order to maintain operating capacity or service output (O’Hanlon and Pope, 1999; Cahan et al., 2000; Isidro et al., 2004; Lin, 2006; Goncharov and Hodgson, 2011). Rees and Shane (2012) explain that the value relevance of FOREX depends on the context of the firm’s operating environment, which on a firm by firm basis is random, and emphasise the importance of a micro firm study. The UNREAL result suggests that this variable is only value-relevant for firms in the financial industry that hold significant financial investments (O’Hanlon and Pope, 1999; Dhaliwal et al., 1999; Biddle and Choi, 2006). The only significant coefficient is CFH which is weakly significant at the 10% level.

Table 5. Association of yearly stock returns with net income and other comprehensive income components (full sample)

<table>
<thead>
<tr>
<th>Predicted Direction</th>
<th>Pooled Full Sample</th>
<th>Addition of Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept *</td>
<td>0.2843</td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td><strong>0.7099</strong></td>
<td></td>
</tr>
<tr>
<td>LOSS</td>
<td><strong>0.1705</strong></td>
<td></td>
</tr>
<tr>
<td>SOCI</td>
<td>0.0735</td>
<td></td>
</tr>
<tr>
<td>UNREAL</td>
<td>0.1897</td>
<td>0.4517</td>
</tr>
<tr>
<td>FOREX x SOCI</td>
<td>0.2620</td>
<td>(0.8545)</td>
</tr>
<tr>
<td>FOREX</td>
<td>0.8856</td>
<td>(0.3340)</td>
</tr>
<tr>
<td>REVAL x SOCI</td>
<td>-0.5516</td>
<td>(0.9886)</td>
</tr>
<tr>
<td>REVAL</td>
<td>2.1984</td>
<td>-0.0251</td>
</tr>
<tr>
<td>CFH</td>
<td>2.4108</td>
<td>0.7869</td>
</tr>
<tr>
<td>CFH x SOCI</td>
<td>-1.6239</td>
<td>(0.6095)</td>
</tr>
<tr>
<td>SIZEit-1</td>
<td>0.0084</td>
<td>(5.42)</td>
</tr>
<tr>
<td>BMit-1</td>
<td>0.0329</td>
<td></td>
</tr>
<tr>
<td>Industry Controls</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1635</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.2541</td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td>0.0000</td>
<td></td>
</tr>
</tbody>
</table>

\[ \beta_0 + \alpha_1 N_{it} + \alpha_2 LOSS + \alpha_3 SOCI + \alpha_4 UNREAL_{it} + \alpha_5 (UNREAL_{it} \times SOCI) + \alpha_6 FOREX_{it} + \alpha_7 (FOREX_{it} \times SOCI) + \alpha_8 REVAL_{it} + \alpha_9 (REVAL_{it} \times SOCI) + \alpha_{10} CFH_{it} + \alpha_{11} (CFH_{it} \times SOCI) + \sum_{k=1}^{9} \beta_{(1+k)} INDUSTRY_k + \varepsilon_{it} \]  

**, and * denote statistical significance at the 1%, 5% and 10% levels respectively. Addition of Coefficients is the addition of the standalone OCI component coefficient and the interaction OCI component coefficient for each respective individual OCI component. The coefficients added together for each individual OCI component are stated under the parentheses in the Addition of Coefficients column. The parentheses for the Addition of Coefficients for
each model contain the p-value for the following Wald test: $\alpha(\text{standalone OCI component}) + \alpha(\text{OCI component interaction variable}) = 0$. The parentheses for all variables contain the t-statistics based on heteroscedasticity-adjusted standard errors clustered by firm. The parentheses for the F-Statistics of each model contain p-values. Variables NI, LOSS, SOCI, UNREAL, FOREX, REVAL, CFH, SIZE$_{it-1}$, and BM$_{it-1}$ are as defined earlier. Nine indicator variables based on industry are included in each model as controls.

Further in table 5 the OCI/SoCI interaction terms are insignificant and provide evidence that reporting OCI components in the SoCI rather than elsewhere does not change their value relevance. This is consistent with the findings of Cahan et al. (2000) that under New Zealand GAAP, there is no difference in the value relevance of OCI components when they are disclosed in the SoCE rather than in the notes to the financial statement. Further, these results also fail to support the behavioural experimental studies of Hirst and Hopkins (1998) and Maines and McDaniel (2000). Finally, the results of Wald tests are insignificant providing further evidence that these OCI components are not value relevant when disclosed in the SoCI. Overall, hypothesis 3 is rejected, with OCI components having no incremental information content when reported in a SoCI.

However, there might be an alternative explanation. These results might simply reflect the fact that investors do not understand the value-implications of reported OCI items because interpretation of these components is conditional on investors’ ability to process complex multi-component information. Accordingly, in the next section we report the results of testing analyst use of OCI components.

4.3 Analysts and individual OCI components

Table 6 presents the results of OLS regression tests of the association between individual OCI components and the change in consensus analyst forecast EPS. Table 6 shows that in the pre-SoCI period, REVAL (positive) and CFH (negative) are used by analysts’ in revising their earnings’ forecasts when reported in the notes or SoCE, while UNREAL and FOREX are not used. These results are consistent with Kanagaretnam et al. (2009) and Hodgson and Goncharov (2011), with the cautionary note that they are only weakly significant at the 10% level.

However when we include the OCI-SoCI interaction in the model, the results indicate that changing the reporting location of OCI components to the SoCI has no impact on analyst forecasts. In effect, the OCI-SoCI interaction lowers the information content of REVAL and CFH. However, an alternative explanation may be that the decreased REVAL and CFH associations may be related to analysts being more able to detect earnings management through these components when they are reported in the SoCI, as suggested by Hirst and Hopkins (1998). Further, the post-IFRS improvement in analyst forecast accuracy may be the result of increased comparability of accounting data and intra-industry information transfers (Cotter, Tarca and Wee, 2012; Bissessur and Hodgson, 2012). Overall, the results largely support hypothesis 5 that reporting OCI components in the SoCI does not change their use by analysts’ in revising forecasts.
Table 6. Association of analyst forecast revisions with other comprehensive income components

The table presents the coefficients from the ordinary least squares regression, model 9. Model 6 is run on the analyst full sample which contains 904 firm-year observations from both the pre-SoCI and SoCI periods. The dependant variable, \( \text{FREV} \), is the change in the consensus forecast for earnings per share (EPS) from the pre-announcement period to the post-announcement period, where the consensus forecasts in each period are calculated as the mean of the individual EPS forecasts made by analysts who report forecasts in both periods.

\[
FREV_{it} = \beta_0 + \alpha_1 FE_{it} + \alpha_2 LOSS + \alpha_3 SOCI + \alpha_4 UNREAL_{it} + \alpha_5 (UNREAL_{it} \times SOCI) + \alpha_6 FOREX_{it} + \alpha_7 (FOREX_{it} \times SOCI) + \alpha_8 (REVAL_{it} \times SOCI) + \alpha_9 CFH_{it} + \alpha_{10} (CFH_{it} \times SOCI) + \alpha_{11} \text{SIZE}_{it-1} + \alpha_{12} BM_{it-1} + \alpha_{13} \text{ACHEARN}_{it} + \alpha_{14} \text{NUM}_{it} + \sum_{k=1}^{2} \beta_{16+k} \text{INDUSTRY}_{ikt} + \epsilon_{it}
\]

***, **, and * denote statistical significance at the 1%, 5% and 10% levels respectively. Addition of Coefficients and the parentheses for the Addition of Coefficients for each model are as defined earlier. The parentheses for the F-Statistics of each model contain p-values. The variables are defined as follows: FE is the mean error in analysts’ forecasts for firm i EPS at time t; ACHEARN is the absolute value of the difference between the current year’s actual EPS and last year’s EPS, deflated by the price at the beginning of financial year; NUM is the number of analyst forecasts included in the consensus forecast. Nine indicator variables based on industry are included in each model. The variables LOSS, SOCI, UNREAL, FOREX, REVAL, CFH, SIZE and BM are as defined earlier.

4.4 Sensitivity testing

We undertake two further robustness tests. First, we test material OCI components on model 4 by sampling firm-year observations that have OCI components with an absolute value greater than or equal to 5% of NI. This material full sample consists of 950 firm-year observations for 325 unique firms. The unreported results are consistent with earlier reported results.
Second, in the analyst forecast tests of model 9, we calculate FREV as the difference between the median pre- and post-announcement consensus forecasts. The financial analyst literature suggests that median EPS forecasts are more accurate than mean EPS forecasts because they contain less bias (Gu and Wu, 2003). Accordingly, model 9 is retested with a median analyst consensus. The unreported results of the median analyst consensus are consistent with earlier results.

5. SUMMARY AND DISCUSSION

The discussion paper that reviews the Conceptual Framework for Financial Reporting asks the fundamental question how can financial statements best portray the entity’s performance during the period. The IASB 2007 revision to International Accounting Standard (IAS), effective 1 January 2009 created a SoCI that aggregated net income (NI) with OCI. The addition of unrealised income with realised income from operations, changed the fundamental meaning of income. In this paper we tested whether this change provided incremental value relevance.

First, we find that CI has less information content than NI and reporting in the SoCI, rather than in the notes or in an equity statement, does not increase the value-relevance of aggregated CI. Second, none of the individual OCI components contain incremental information content beyond NI when reported in the SoCI. Third, SoCI reporting negates the weak information content contained in REVAL and CFH associated with analyst forecast revisions. Alternative explanations revolve around increased analyst accuracy or ability to sift out earnings management deserve further research intensity.

The implication for standard setters is that the measurement and reporting of OCI components remain problematic, at least in the smaller Australian market. In answering the question, does reporting CI in the SoCI provide more useful valuation information for investors and financial analysts – the simple and straight-forward answer is no, and at this stage reporting CI in the SoCI does not seem to pass a cost-benefit examination.

REFERENCES


BALANCE-SHEET AND TAX CONCEPTS OF A FINANCIAL RESULT IN POLAND AS A BASIS OF MANAGEMENT DECISIONS

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Abstract
The balance-sheet and tax concepts of a financial result are two different concepts of a financial result. Despite similarities, these represent a different information content. On the other hand, financial data presented by the accounting system are a basis for the management to make varied decisions that oftentimes affect the whole of their business activity. Therefore, in order for the decision-making process to run smoothly, it needs to be based on properly adjusted data depending on the circumstances. The balance-sheet result shall find application in this field.
One of elements of the decision-making process is tax planning. It needs to be based on figures calculated in accordance with tax law. Otherwise, the effect of the actions undertaken shall be invalid as it will be based on incorrect data. Therefore, there exists a legitimate need to learn the specificity of these figures and their applicability in decision making.

Keywords: accounting, accounting law, tax law, profit, profit, loss

1. INTRODUCTION

The management is responsible for the whole of functioning of a company. Any decisions regarding both operational and strategic objectives are made by the management. In particular, it affects matters such as: adjustment of business plans, personal matters or investments. All these decisions are made on the basis of properly prepared financial data. On the other hand, solutions that are supposed to bring about significant financial profit, are being implemented. Therefore, the basis of the undertaken actions are the fundamental financial data, which encompasses for example: revenues, expenses, and financial result.

Financial figures, usually expressed in the form of fixed amounts, in a particular currency, are calculated (estimated) on the basis of adequate principles and rules of conduct. This is due to not only their construction, but primarily the legal regulations that usually define what constitutes particular figures.

The economic reality causes the same financial figures to be characterized differently in various legal acts. It is essentially a result of the objectives of a specific branch of law. The balance-sheet law and the tax law, which, due to different objectives, define the basic business figures differently, are a good example of this. Hence, if several legal definitions of the same financial categories can be distinguished, it is a natural consequence that their information content, which may be narrow or broad, differs. That is why there exists a legitimate need to skillfully adjust the formulated financial data depending on the kind of management decision being made.

The goal of the paper is an attempt at portraying the concepts of balance-sheet and tax financial results that may act as a basis for making various management decisions. This category differs from a balance-sheet approach, which in practice carries the necessity to recognize and interpret these differences properly.

1 Publication funded through a grant to the university Research Young Scientists.
In relation to that, the specificity of a tax financial result, its components, and the rules of determining seem to be quite significant. Making specific decisions in a company needs to be based on thoroughly prepared data, which in turn needs to be properly adjusted to the situation. Yet it also needs to be remembered that the strict rules that accompany determining a tax financial result significantly limit the analytical possibilities. If the tax financial result often acts as the basis for making management decisions, then it may serve various analytical purposes, depending on the kind and circumstances of a particular situation.

2. **THE PROCESS OF MAKING MANAGEMENT DECISIONS.**

Current activity of a company and its functioning in the future are strictly related to processes of making particular decisions that are supposed to allow for achieving specific objectives. The economic reality in which companies operate, as well as the pace of the occurring changes cause the ability to make proper decisions in adequate time to gain significant importance.

In general understanding a decision is associated with making choices, solving the arising problems, setting goals and directions, as well as determining methods serving to achieve them. Making decisions is an art of solving issues and making choices that are the best in terms of possible profits and risks. It is of key importance to the efficiency of management and functioning of a company, as well as its development in the future. Contemporary management may be seen as a process of making decisions and creating conditions for effective execution of the decisions made (Adair, 2011).

<table>
<thead>
<tr>
<th>Table 1. Selected definitions of the decision-making process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M. Bielski</strong></td>
</tr>
<tr>
<td><strong>K. Bolesta-Kukulka</strong></td>
</tr>
<tr>
<td><strong>W. Kieżuń</strong></td>
</tr>
<tr>
<td><strong>P. F. Drucker</strong></td>
</tr>
<tr>
<td><strong>R. W. Griffin</strong></td>
</tr>
</tbody>
</table>

Source: Own elaboration.

The decision-making process affects every segment of the activity of a company, which, as a result, in practice may cause the decisions to have quite a varied character, which, in turn, means that they can be divided according to the adopted criteria.
Figure 1. Sample management decisions
Source: Own elaboration.

Usually, the basis for making management decisions is financial information prepared by relevant departments of a company. Their source is data presented by the accounting system which transforms business operations into figures that, in turn, are presented in a particular way. Oftentimes elements such as revenues, expenses, financial result, and corporate revenue tax, are taken into account. This is because it is impossible to make a valid decision without first identifying the money flow resulting from the undertaken actions. From the viewpoint of accounting every decision made by the management of a company is based on specific financial circumstances.

Better understanding of the specificity of a financial result, which usually constitutes the basis of pre-decision considerations and may be determined in a number of ways depending on the needs, seems vital.

### 3. BALANCE-SHEET FINANCIAL RESULT OF A COMPANY AS THE BASIS FOR MAKING MANAGEMENT DECISIONS

Business activity conducted by companies is always aimed at achieving a particular goal – profit. It has been and always will be a fundamental factor in terms of the undertaken business activity. Otherwise it would not make any sense.

In economic literature one may encounter the widely popularized idea that in an economy based on private ownership of the means of production, profit functions as the goal (because it is the basic criterion for making rational decisions) (Czekaj, Dresler, 2005, p. 16). Usually, profit is defined as the surplus of the revenue from the business activity that exceeds the expenditure. It is the most general notion of profit, often also referred to as a positive financial result. Perhaps the sole term “financial result” will be more adequate here and will better reflect the goal of accounting because sometimes, as a result of a particular confluence of events and decisions of the management, a company might not make profit at all. Then it is a loss or a negative financial result, which is
basically a situation opposite to the one discussed above – in this case the expenditure of a company exceeds the revenues. In such a situation the objective of accounting is also to measure and present the loss as a negative financial result. There exists yet another possible situation in which the financial result amounts to zero – the company does not make any profit, but it does not suffer a loss either. However, in business practice such a situation is extremely rare.

A financial result is determined on the basis of a traditional formula specified in the Accounting Act. What is especially significant here is the definition of revenues and expenses as well as other elements shaping a financial result.

Table 2. Basic definitions shaping a financial result in balance-sheet law

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>revenues and profits</td>
<td>substantiated occurrence of economic profit during a reporting period, with reliably measured value, in the form of increase of the worth of assets or decrease of the worth of liabilities, which will lead to the increase of the company’s own capital or to the decrease of the company’s deficiency of it in a manner different than contribution of means by the shareholders or owners;</td>
</tr>
<tr>
<td>expenses and losses</td>
<td>substantiated decrease of economic profit during reporting period, with reliably measured value, in the form of decrease of the worth of assets or increase of the worth of liabilities and stocks, which will lead to the decrease of the company’s own capital or the increase of its deficiency in a manner different than withdrawal of means by the shareholders or owners;</td>
</tr>
<tr>
<td>other expenses and operating revenues</td>
<td>expenses and revenues indirectly related to the operational activity of a company</td>
</tr>
</tbody>
</table>

Source: Own elaboration on the basis of the Accounting Act (Accounting Act dated 29. 9. 1994, Article 3)

Calculating the results requires one to select a proper method of measurement. In the calculation of results conducted in accordance with the regulations of the balance-sheet law, both the domestic one and the international one, the measurement of a financial result is based on the historical cost and is carried out on the basis of nominal monetary units. Result determined in such a manner is often referred to as the accounting result.

Additionally, focusing the business activity on the increase of profit leads to more and more common conviction that a financial result and the indicators and interpretations formulated on its basis do not reflect the efficiency of the business activity of a company thoroughly enough and do not constitute a measure sufficiently accurate for valuation of the worth of the business entity. It is a result of the fact that the worth of profit is an accounting figure that is calculated in accordance with the principles of accounting (Micherda, 2004, p. 44). Another approach assumes that a financial result constitutes a classic accounting result adjusted to accommodate the inflation rate (change of prices). The principle of a historical cost applies, however, it is necessary to adjust it and accommodate the changes caused by inflation (Dobija, Jędrzejczyk, 2005, p. 52–65).

Depending on the adopted forms of registration, valuation, and presentation of particular events, a company may in some ways influence the amount of the financial result, i.e. it can somehow shape it.
A financial result is one of the most important measures of the results of a business activity and its amount shows the level of profitability of the company. Maximizing profit is the main objective of the company in short term. However, in long term the improvement of the amount of the financial result affects the growth of the worth of the company, which, in turn, is the main long-term objective. Nowadays, often maximization of the wealth of the owners, who spend a part of their means to multiply them and give up their immediate consumption in favor of future profit, is defined as the main aim of a company. Unsatisfying results of a company cause the owners to withdraw the entrusted capital and allocate it for another enterprise.

While considering maximization of the satisfaction of the owners, understood as the main goal of a company, it is good to pay attention to the measure that would explicitly allow for assessment of the degree of execution of this goal. Classically, such measure would be the level of the financial result, reflecting the degree of efficiency of the use of the resources at disposal. Accounting measures the level of a financial result and as a consequence determines the particular decisions made by the company. With low financial result, i.e. small profitability, a company will aim to improve these indicators, which should be positively received by the environment. On the other hand, decreasing dynamics of a financial result may be caused by negative processes and phenomena occurring in a company, which may also act as the basis for implementation of particular operations. A financial result is one of the most important measures of the results of a business activity and its amount shows the level of profitability of the company. Maximizing profit is the main objective of the company in short term. However, in long term the improvement of the amount of the financial result affects the growth of the worth of the company, which, in turn, is the main long-term objective. Nowadays, often maximization of the wealth of the owners, who spend a part of their means to multiply them and give up their immediate consumption in favor of future profit, is defined as the main aim of a company. Unsatisfying results of a company cause the owners to withdraw the entrusted capital and allocate it for another enterprise.

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![Diagram of determining the financial result in terms of the balance sheet](source: Own elaboration)
result presented by accounting, as a synthetic measure of the results of a company’s activity, is the basis for determining a future action plan. A financial result as an accounting category is determined according to the so-called accrual basis, in which revenues and the expenses related to generating the revenues are to be registered for the period in which they occurred and which they affect, regardless of their settlement date (payment date).

Finally, in the last one, there are critical voices regarding net profit as a measure of the effects of a company’s activity. One of their arguments is that it refers to the past and therefore, at most, allows for assessment of the current situation. Yet the owners are interested not only in the ex post analysis, but also in ex ante one. Clearly, knowing the amount of the result, we are able to predict its amount in the future, but such forecast may be quite subjective. Usually it is assumed that the future financial situation of a company will be similar to the current one, but the further into the future the forecasts are, the higher the risk of making an estimation mistake. However, in most companies risk management is dealt with in particular departments (e.g. finances). Lack of a comprehensive approach to risk identification and prevention results in a situation when information about a significant risk reaches the managers only after the occurrence of an event causing a large loss of profit and usually then it is already too late for proper prevention. Another argument of the critics of profit is the fact that it does not accommodate the time factor, in particular change of the value of money in time.

As it has already been mentioned, a company may to some extent, which is indirectly related to the company’s operational activity, influence its revenues and expenses. This causes the credibility of such a financial result to be questioned at times. Therefore, the disadvantages of profit acting as a measure of the worth of a company are as follows:

   a) possibility to use alternative valuation methods,
   b) lack of accommodation of risk,
   c) overlooking capital investment,
   d) lack of accommodation of the policy of dividend payment,
   e) lack of accommodation of changes of the value of money in time.

The market manner of management emphasizes the goal of accounting, which is primarily a relevant cross-sectional measurement of a financial result (profit). This aspect causes primarily profitability indicators, the construction of which is based on a financial result, to be taken into account. On the basis of the abovementioned disadvantages of profit, companies emphasize the significance of a financial surplus. The structure of a surplus includes not only the income generated by the invested capital, but also the income constituting a return of a part of the invested capital (Bien, 2008, p. 17).

Hence, the claim that financial surplus is a measurement reflecting the efficiency of a company better than an accounting financial result does, is becoming more and more popular.

A financial result presented in a financial report is based on the so-called balance-sheet legal regulations. According to the accounting model adopted in Poland, the accounting system is to also distinguish tax figures that do not fully concur with the balance-sheet approach. What is more, knowledge of tax figures in a company is essential as very often it conditions the further course of action.

4. TAX FINANCIAL RESULT AS AN ELEMENT OF THE MANAGEMENT DECISIONS MADE

Fiscal goal of tax law is the imperative feature determining the solutions in force in Poland as far as tax law is considered. For this reason it is not possible to bring together the imperative principles of accounting that determine the rules of recognition and presentation of results of activity of a company, and the tax constructs in this field. This means that the existence of differences is natural. It also needs to be remembered that the decision-making process affects planning and implementation of a particular tax policy too. The process may not be carried out without knowledge of such tax figures,
as: revenues, expenses, and financial result. They are defined and presented a little differently than in the Accounting Act.

**Table 3. Definition of tax elements affecting a financial result**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>revenue</td>
<td>received money, monetary value, including exchange gains; the value of received items or rights, as well as the value of other benefits in kind, including the value of items and rights received free of charge and the value of other free or partially free benefits</td>
</tr>
<tr>
<td>tax deductible expenses</td>
<td>expenses borne in order to obtain revenue or retain or secure the source of revenue, excluding specified expenses</td>
</tr>
<tr>
<td>taxation base</td>
<td>income after deducting the amounts specified in the legal regulations</td>
</tr>
</tbody>
</table>

Source: The Law on Corporate Income Tax Act dated 15.02.1992, article 12, 15, 18

The tax law does not only define particular elements of a financial result differently than balance-sheet law does, but it also determines the methods of its calculation in a slightly different manner.

\[
\text{Tax revenue} = \text{Income or tax loss} - \text{Tax costs} - \text{Tax exemptions and deductions} + \text{Allowances} = \text{Income to be taxed or tax loss} \times 19\% = \text{Tax} - \text{Tax exemptions} = \text{Due tax}
\]

**Figure 3. Principles of determining corporate revenue tax**

Source: Own elaboration

Considering the fact that the accounting system needs to meet the requirements of both, the tax law and the balance-sheet law, in order to properly aggregate tax figures, it is necessary to employ the so-called adjustments and exemptions. This allows for correct calculation of the taxation base and, as a consequence, the due corporate revenue tax.
Tax revenues, despite similarities to balance-sheet revenues, are a different category. First and foremost, the tax law demands that revenue is recognized anytime a transaction is not made in accordance with market conditions (the so-called free-of-charge benefits). The difference lies also in the cash approach to the moment of creation of some revenues. Balance-sheet revenues, on the other hand, are recognized on accrual basis. This difference affects the capacity and decisive utility of tax revenues, at the same time limiting their influence on the decisions made.

Tax deductible expenses are a much narrower category than balance-sheet expenses. It is a result primarily of the fiscal goal of tax law, which limits the expenses that may constitute tax costs. As a consequence, differences in terms of the amount of these kinds of costs and expenses are emerging.
Management decisions made on the basis of tax financial result will primarily concern tax planning. Usually, it is an extremely significant element of strategy of a company’s activity. An attempt to determine the tax flows and identification of their spread in time must be carried out on the basis of figures presented in accordance with tax regulations. Due to the complicated tax system in Poland and the increase of the complexity of operated business activity, when we consider the wide spectrum of tax regulations, it is visible that it is not possible to make most management decisions without accommodating the tax aspect. The high degree of interference of the tax legislator in the economic sphere is well reflected in this situation.

Decisions regarding actions related to matters such as:
1. legal form,
2. kind of business activity,
3. directions of development,
are made with the tax forecasts in mind. Tax financial result, which is a resultant of several elements, including also the tax rate, is of key importance, as the amount of tax liabilities affects, for example, the profitability of a company. Tax payment deadlines affect the financial liquidity. As a consequence, we reach the conclusion that tax financial result indirectly affects the financial situation of a company. Tax payments, which depend on its amount, need to be considered during the process of making decisions requiring large expenditure (e.g. investments).

5. CONCLUSION

The management decisions made are supposed to cause the growth of the value of the company and, as a result, increase the rate of return of the invested capital. In every business entity, regardless of its size and organizational structure, there are decisions being made. The pace and formalization of this process depends mainly on the size of the company and the adopted management model. The common denominator, however, is making decisions on the basis of particular calculations or financial forecasts. The source materials for those is usually financial information generated by the accounting system. Depending on the examined problem, the report data may vary.

The balance-sheet financial result and its components are the main element to be analyzed here. It is on its basis that various indicators, forecasts, and money flows are calculated. There are numerous ways of utilizing it and, in practice, management of a company employs them. Despite multiple analytical and managing aspects, this category has one limitation. Namely, it does not take into account the tax figures, which, due to their specificity, will represent a different approach to the financial result. On the other hand, the significance of tax figures is so huge that they may not be overlooked during the decision-making process. Therefore, the tax result, alongside balance-sheet result, constitutes an important link of decision-related settlements. Obviously, its employment occurs in a slightly different manner; nonetheless, it complements the decision-making process by providing knowledge of the tax flows, which is extremely important for the management.

What is also worth mentioning is the formula for calculating balance-sheet financial result, which, in its construct, divides the revenues and expenses depending on their source. On the other hand, the tax law only categorizes the revenues and expenses on a synthetic level. This difference carries other analytical and decision-making possibilities. While it will be easy to calculate the money flow in all the segments of activity of a company (operational, other operational, and financial) in accordance with balance-sheet regulations, it will not viable if we are working on the basis of tax figures. This issue is quite significant as the decisions made in an enterprise affect various plateaus of the company’s activity. Certain limitation of management possibilities of using the tax financial result may be observed here. On the other hand, it seems rather natural because tax category is first and foremost supposed to serve for tax analysis (tax decisions), which constitutes only one element of the whole of decision-making process conducted by management of a company.
REFERENCES

THE (DIS)HARMONIZED RESIDENTIAL PROPERTY MORTGAGES IN THE EU

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Abstract
Modern European integration is intimately linked to the single internal market, which was negatively impacted by the global 2008 crises. The instability and loss of confidence extended into many spheres, including the very socially sensitive residential mortgage financing. Almost all EU member states decided to take action in order to boost the stability, responsibility and the level of information. Since the problems have many national particularities and the correction actions also demonstrated dramatic differences between EU member states, the EU went ahead with a legislative initiative which materialized in the Mortgage Credit Directive (“MCD”) in 2014 with the ambitious goal to harmonize, support responsible behavior, provide appropriate consumer protection and to stabilize residential lending in the EU in general. The transposition deadline for the MCD expired in March 2016 and it is highly illustrative to overview its key provisions as well as the dynamics of the residential mortgage financing in EU member states since 2008, i.e. both before and after the adoption and transposition of the MCD. The available data, field observation and case studies suggest that residential lending was and remains dramatically different across the EU and that the responsible lending and residential real estate purchasing has variable shapes and intensities due to national particularities. The single internal market needs the harmonized financial stability and consumer protection and the EU goes for it with the MCD. However, should the MCD reduce by the harmonization the national particularities? Is the MCD capable to do so?

Keywords: EU, mortgage credit directive (MCD), residential real estate

1. INTRODUCTION
Modern European integration is founded by a constitutional trio consisting of the Treaty on European Union (“TEU”), the Treaty on the functioning of the EU (“TFEU”) and the Charter of Fundamental Rights of the EU (“Charter”) in their consolidated post-Lisbon version. This trio continues the strong emphasis on the single internal market with the famous four freedoms of movements – of goods, services, capital and people.

The global 2008 crises had a negative impact on the financial market and led to a loss of confidence of market participants (Cvik & MacGregor, 2016). Simultanously, they ended the prior set-in-stone real estate market paradigms, i.e. real estate prices went down as well as the demand for it, leading to a dramatic increase in unfinished and incomplete building projects (Hajnal, 2015). Indeed, the events since 2008 have revealed that housing markets in the EU are significant causes of instability (Whitehead et al., 2014). The ongoing uncertainty, loss of confidence, and profitability downturn was identified across European countries, industries and all sizes of businesses (Lacina & Vavřina, 2014) and negatively impacted even European consumers. Naturally, in 2008 the EU financial law was in place as well as the EU consumer law, which protected consumers through (i) information and (ii) fairness (Méndez-Pinedo, 2015), but this coverage did not did not work for mortgagors during the crisis. Such a situation was clearly not in compliance with Europe 2020
Strategy for the smart, sustainable and inclusive growth (“Europe 2020”) and the European Commission opted to make great changes especially in consumer law. The goal of action was to stabilize the situation and real estate prices, as well as create principles for a correct granting of credits, which should lead to an improvement of efficiency and to the re-creation of the financial and real estate markets of the entire EU as well as of individual EU member states (Cvik & MacGregor, 2016). The endeavor towards this ambitious goal was materialized by the issuance of the Directive of the European Parliament 2014/17/EU on credit agreements for consumers relating to residential immovable property on 4th February 2014 (“MCD”). Interestingly, the MCD adds to the duo of well known EU consumer law concerns – the information and the fairness – another duo of concerns – affordability and responsible lending (Méndez-Pinedo, 2015). The deadline for the transposition of the MCD harmonization into national legal systems expired in March, 2016. Logically, obvious questions emerge. Are residential real estate prices stabilized in the EU? Is the residential mortgaging harmonized across the EU? Is the MCD goal met, i.e. is the efficiency improved and the financial and real estate markets are booming and enjoying solid trust across the EU? Or is the MCD just a false compromise product of bureaucrats detached from real life? Naturally, the ultimate answers to these questions will come in the next years. However, already now, after a few months since the transposition deadline, very interesting indices and even patterns can be discovered and discussed. Since both economic and legal aspects are covered, then the quantitative and qualitative methods need to be complemented by deductive and inductive aspects of legal thinking (Matějka, 2013) because legal theoretic orientation reflects the legal science which is not axiomatic but argumentative (Knapp, 1995). Indeed, the already available data, with a high relevancy and diverse provenience, can be processed by the indicated methodological setting and offer various perspectives, enhance awareness and bring a new light in this critical sphere of European integration directly impacting Europeans. So, mirror mirror on the wall is the MCD good for something at all?

2. RESIDENTIAL MORTGAGING IN THE EU PERSPECTIVE AND MCD

The emergence of the 2008 crises was connected to the irresponsible behavior of market participants, which often breach ethical, and sometimes even legal, rules. These crises hit states, markets and industries with a different intensity and at different times and government responses and housing-financial market adjustments have varied (Whitehead et al., 2014). One of the common features was the instability, i.e. the global financial crisis has revealed that liberalized housing markets in the EU are significant causes of instability across the entire EU (Whitehead et al., 2014). This situation had negative consequences for the financial system, in particular with respect to mortgaging, and led to a loss of confidence by the players which participate in the financial market and to the drop, if not crash, of real estate prices, and perhaps even value. The return of financial instruments originally provided by granted credits became unbearable for debtors and consequently there were delays and defaults, and ultimately forced sales of real estate. This became a threat not only for the financial market, but as well the entire economy of EU member states (Cvik & MacGregor, 2016). Consequently, the EU decided to indirectly legislate principles and rules for a correct granting of credits related to residential real estate and to re-establish the stability of the financial market. This initiative had a long roots going back to the good times of Amsterdam and Nice, way before the aborted EU constitution and 2008 crises.

During the creation of these principles and rules, there were identified a number of issues directly related to the irresponsible granting and accepting of credits and further to the irresponsible behavior of market participants, such as banks, financial institutions and intermediaries granting credits for the purchase of residential real estate and the their purchasers. The abuses have occurred on both sides – consumers clearly unable to repay have obtained credits because of nepotism and “insider push”, while consumers ostensibly able to repay did not receive the credit, because of incompetency and arrogancy of credit providers. A tension was created by the information and
power asymmetry, where the financial professionals repeatedly granting credit were on one side and the purchasers of the residences, especially first time mortgagors often pushed by their government to move from the residence category into the ownership category, on the other side. Naturally, these mortgagors without the consumer status and protection were vulnerable, and temptations for abuses and errors by various stakeholders have emerged (Cvik & MacGregor, 2016). Hence, the EU decided to step in and over ten years of directives on financial services and general consumer protection in reflection of TEU, TFEU (especially Art. 114), the Charter and the case law of the Court of Justice of EU (“CJ EU”) got another addition, the MCD.

Table 1. Directives on consumer protection in financial services (Cvik & MacGregor, 2016)

<table>
<thead>
<tr>
<th>Financial Services</th>
<th>General Consumer Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit and retail services</td>
<td>General rights and Digital</td>
</tr>
<tr>
<td>Payment and Insurance</td>
<td>Customer Rights Directive</td>
</tr>
<tr>
<td>Distance Marketing Directive</td>
<td>Unfair Commercial Practices</td>
</tr>
<tr>
<td>Consumer Credit Directive</td>
<td>Directive on consumer ADR</td>
</tr>
<tr>
<td>Payment Service Directive</td>
<td>Misleading Advertising Dir.</td>
</tr>
<tr>
<td>Mortgage Credit Directive</td>
<td>E-Commerce Directive</td>
</tr>
</tbody>
</table>

As indicated above, the MCD has its roots in the pre-crises era, since the European Commission launched a process regarding the barriers to the internal market for credit agreements relating to residential real estate already in 2003 and The White Paper on the Integration of EU mortgage credit markets was adopted in 2007. Thus, the preparation of the MCD took over one decade, saw many milestones and turmoils and identified a series of problems related to irresponsible lending and borrowing. The EU rightly wanted to correct these issues to the ambitious extent that an equivalent level of consumer protection will be provided across the EU and national laws should be approximated. The MCD was adopted in the manner that it should, through harmonized, flexible and just credit agreements regarding real estate, establish a more transparent and efficient internal market and enforce sustainable credit granting. The MCD should contribute to the so called “responsible lending” concept partially developed by the World Bank, i.e. to the policy aimed at ensuring responsible behavior of participants in the financial market, including both lenders and borrowers (Mak, 2015). In addition, the MCD should improve the conditions for the functioning and stabilization of the internal market and approximate legal regulation of this field in EU member states (Cvik & MacGregor, 2016).

An analysis of the MCD reveals a robust preamble with 85 paragraphs aimed at explaining in detail the motivation and desire behind the MCD and a rather concise main body with 50 Articles. The MCD makes clear that it targets residential lending and that consumers and businesses, especially banks, are not in the same position and do not need the same level of protection (Art. 1). The MCD did not opt for a full and absolute harmonization and thus EU member states are allowed to provide consumers with an even stronger protection than the protection previewed by the MCD, as long as such a stronger protection is consistent with the EU law (Art. 2). This type of harmonization is called target harmonization, where certain explicit MCD provisions are mandatory, and thus individual EU member states cannot, based on transposition, deviate from them. The MCD has a broad coverage and includes all credit agreements ensured by the mortgage or other guaranty and credits for real estate and credit agreements used to finance renovation of real estate (Art. 3). The MCD ostensibly wants to help the consumers to make educated decisions and requires financial education of consumers (Art. 6) and ethical behavior by residential mortgagees (Art. 7), while specifically imposing a duty on them to provide information free of charge to consumers (Art. 8) and to maintain knowledgeable and competent staff (Art. 9). The duty to provide clear information, especially during the negotiation and pre-contracting stage
(Art. 10 et foll.) deals, among else, with formalistic abuses in the continental law universe. The ongoing attention to the consumers is reinforced by the demand of qualified information, e.g. the duty to provide adequate explanations and indicate the annual percentage rate of charge (“APRC”) (Art. 17). However, the biggest legislative revolution can be perhaps identified in the compulsory creditworthiness assessment (Art. 18), which basically makes creditors responsible for granting credits only to those consumers who can realistically repay them, and the right to early repayment without sanction fees (Art. 25). Also other provisions match in this system and thus standards need to be established for property valuation (Art. 19), arrears and foreclosure should be fair and not predatory (Art. 28) and supervision of credit intermediaries performed (Art. 34). Unsurprisingly, the MCD is for disclosure of sanctions for the breach of the MCD regime (Art. 38) and excludes the waiver of the MCD regime by consumers (Art. 41).

In sum, the MCD incorporates main principles which concern the right of consumers to get information, repay the credit earlier, the creditworthiness assessment and credit-appropriateness for consumers, the requirement for an adequate regulation, the monitoring of non-banking providers of mortgages and the requirements on the expertise of persons acting for consumers. (Cvik & MacGregor, 2016). To these principles included in the MCD belong as well principles about property valuation of real estate financed by granted mortgages, see Art. 19 of the MCD. The prescriptive solutions brought by the MCD consider both loan-to-value ratio (“LTV”) and loan-to-income ratio (“LTI”) (Mak, 2015). Indeed, the MCD appears as a well-meant robust pro-consumer instrument aimed to stabilized the single internal market. However, is it really?

Logically, the MCD is a hybrid and compromise outcome inspired by both common law and continental law traditions, while perhaps the common law touch prevails (Cvik & MacGregor, 2016). It uses appropriate English (common) law concepts, methods, and terminology, and of course needs to be transposed into national law which mostly shares the continental law tradition and uses different law concepts and terminology. Once the MCD is transposed, the burning issue of approximating different countries with different economies and residential tradition emerges.

The MCD needs an interpretation and the CJ EU case law, such as C-415/11 Aziz, it promptly moves to underline three aspects of MCD, improving pre-contract information, assessing creditworthiness and of property valuation along with the foreclosure system (Whitehead et al., 2014) and to focus on the issue of specific requirements for national enforcement laws, as stated in Art. 28 of the MCD (Sein & Lilleholt, 2014). To these belongs among else the sensitive duties of the MCD to assure the professionality and decency of providers of credits for residtial mortgaging, to shift the responsibility burden and to obtain the best efforts price in a forced sale, while considering the consumer’s possible right to housing (Cvik & MacGregor, 2016). Regardless of the interpretation and transposition of the MCD, it is obvious that the MCD targets a dramatically heterogenous pool of countries and national laws and for certain EU member certain is a revolutionary measure requiring massive national changes no only in the field of law.

3. RESIDENTIAL MORTAGING ON THE DAWN OF MCD IN PERSPECTIVES OF EU MEMBER STATES

Modern European integration is an extremely complex set of approximations and unification procedures working with and involving subjects following various legal and other traditions and cultures and demonstrating dramatically different capacities, commitments and motivations (MacGregor, 2014). Especially endeavors towards the single intaral market and the competition on it has shown a blurred distinction between historical truth and reality (Chirita, 2014) and that the interpretation of the same events, rules and norms can significantly vary over time.

These variations, differences and divergences become more visible during hard times and the MCD saga demonstrates this clearly. As indicated above, the MCD came as a hybrid instrument, inspired more by the common law than continental law, on the border of the financial law and consumer protection law with the goal to balance and harmonize financial and real estate markets in
the EU. However, a closer scrutiny in the EU member states shows that even with harmonized rules placed in MCD and “sister” directives, the modalities of “responsible lending” remind and perhaps will remain different (Mak, 2015) for many reasons. One of them is that fact that the MCD is a questionable compromise between different legal and economic approaches to unfairness, especially vis-à-vis consumers, in member states sharing different tradition and belonging to different law families (Méndez-Pinedo, 2015).

The MCD targets perhaps the most economically and socially significant investments of Europeans, the purchase of residential properties. Obviously, this sphere has been in the center of the attention of EU member states, their governments, policies and laws. Thus, the EU harmonization initiative is confronted with well established, different national settings. Indeed, the historical and legal context strongly shaped the MCD (Gellings et al., 2014) and its national transposition is complex. In addition to cultural and legal tradition, the particular economic setting shaped the pre- and post-MCD scenery. Boldly, the MCD ambitiously came to fix a phenomena which had different shapes and intensities in EU member states. The timing, heavi-ness of the financial crisis and the fluctuation of residential real estate were dramatically different across the EU member states. It is highly illustrative to recapitulate real estate and financial data which was a source of great worries and contributed to the motivation for national as well as the MCD iniciative.

Table 2. Residential real estate price changes from 2007 to 2013 (2010 as the average 100)
Prepared by the author based on OECD House Price data ver. 2014 and Whitehead et al., 2014

<table>
<thead>
<tr>
<th>EU member</th>
<th>2007</th>
<th>2013</th>
<th>Difference</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>95</td>
<td>114</td>
<td>+19</td>
<td>Fast recovery and fairly consistent increase</td>
</tr>
<tr>
<td>Belgium</td>
<td>96</td>
<td>101</td>
<td>+5</td>
<td>Very stabilized</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>104</td>
<td>93</td>
<td>-11</td>
<td>Falling since 2011</td>
</tr>
<tr>
<td>Germany</td>
<td>100</td>
<td>115</td>
<td>+15</td>
<td>Stabilized until 2010, then rapid increase</td>
</tr>
<tr>
<td>France</td>
<td>105</td>
<td>98</td>
<td>-7</td>
<td>Stabilized until 2012, then slight decline</td>
</tr>
<tr>
<td>Great Britain</td>
<td>113</td>
<td>98</td>
<td>-15</td>
<td>Decrease</td>
</tr>
<tr>
<td>Denmark</td>
<td>124</td>
<td>91</td>
<td>-33</td>
<td>Significant decrease</td>
</tr>
<tr>
<td>Finland</td>
<td>99</td>
<td>98</td>
<td>-1</td>
<td>Very stable</td>
</tr>
<tr>
<td>Ireland</td>
<td>138</td>
<td>76</td>
<td>-62</td>
<td>Dramatic decrease</td>
</tr>
<tr>
<td>Netherlands</td>
<td>106</td>
<td>79</td>
<td>-27</td>
<td>Strong decrease</td>
</tr>
<tr>
<td>Portugal</td>
<td>95</td>
<td>90</td>
<td>-5</td>
<td>Consistent slow decrease</td>
</tr>
<tr>
<td>Slovenia</td>
<td>112</td>
<td>87</td>
<td>-25</td>
<td>Consistent fast decrease</td>
</tr>
<tr>
<td>Spain</td>
<td>117</td>
<td>74</td>
<td>-43</td>
<td>Dramatic decrease</td>
</tr>
<tr>
<td>Sweden</td>
<td>96</td>
<td>101</td>
<td>+5</td>
<td>Slow and irregular increase</td>
</tr>
<tr>
<td>Eurozone</td>
<td>105</td>
<td>92</td>
<td>-13</td>
<td>Regular decrease</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EFTA member</th>
<th>2007</th>
<th>2013</th>
<th>Difference</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>147</td>
<td>105</td>
<td>-52</td>
<td>Rapid decrease, but since 2013 growth</td>
</tr>
<tr>
<td>Norway</td>
<td>101</td>
<td>112</td>
<td>+11</td>
<td>Consistent increase</td>
</tr>
<tr>
<td>Switzerland</td>
<td>91</td>
<td>116</td>
<td>+25</td>
<td>Consistent strong increase</td>
</tr>
</tbody>
</table>

Table 2 does not offer many similarities or clear patterns, instead it demonstrates the very obvious – the 2008 crises and the following events impacted residential real estate prices in the EEA member states dramatically differently. From 2007 to 2010, prices of residential real estate decreased on average in the EU by 6% and no dramatic increases occurred thereafter. As a matter of fact, the Eurozone kept falling. However, the arithmetic mean is extremely misleading in this context, because virtually each and every EU member state offers dramatically different residential real estate price trends. For example, in some EU members states the residential estate fell in price by 43%, while others increased by 15%. On the going down side of the spectrum was prima facia Ireland and Spain, while on the uptick of the spectrum were Germany and Austria. The most
stabilized were Finland, Portugal, Belgium, and Sweden. The Czech Republic and Slovakia oscillated around 10% decrease and so match the EU average.

However, the residential real estate price and its fluctuation is one thing and the purchasing, i.e. getting and paying a mortgage for it, can mean something different. The right question seems to be to ask about what is the GDP of the country, how much are outstanding residential real estate mortgage loans, which is their ratio and how large a segment of the population is or can become residential real estate owners.

Table 3. Ratio of outstanding residential mortgages loans to GDP in %
Prepared by the author based on EMF/OECD ver. 2014 and Whitehead et al., 2014

<table>
<thead>
<tr>
<th>EU member</th>
<th>2007</th>
<th>2012</th>
<th>Difference</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>24</td>
<td>28</td>
<td>+4</td>
<td>Small increase compared to the price increase</td>
</tr>
<tr>
<td>Belgium</td>
<td>38</td>
<td>49</td>
<td>+11</td>
<td>Large increase compared to the price increase</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>10</td>
<td>14</td>
<td>+4</td>
<td>Very low ratio with a small increase despite the fall of the prices</td>
</tr>
<tr>
<td>Germany</td>
<td>48</td>
<td>45</td>
<td>-3</td>
<td>Small decrease despite a big price increase</td>
</tr>
<tr>
<td>France</td>
<td>35</td>
<td>43</td>
<td>+8</td>
<td>Increase despite the price decrease</td>
</tr>
<tr>
<td>Great Britain</td>
<td>83</td>
<td>81</td>
<td>-2</td>
<td>Decrease mirroring the price decrease</td>
</tr>
<tr>
<td>Denmark</td>
<td>93</td>
<td>101</td>
<td>+8</td>
<td>Increase despite the dramatic price decrease</td>
</tr>
<tr>
<td>Finland</td>
<td>35</td>
<td>44</td>
<td>+9</td>
<td>Increase despite stable prices</td>
</tr>
<tr>
<td>Ireland</td>
<td>75</td>
<td>78</td>
<td>+3</td>
<td>Slight increase despite massive price decrease</td>
</tr>
<tr>
<td>Netherlands</td>
<td>96</td>
<td>108</td>
<td>+12</td>
<td>Very high ratio with an increase despite price decrease</td>
</tr>
<tr>
<td>Portugal</td>
<td>60</td>
<td>67</td>
<td>+7</td>
<td>Increase despite a price decrease</td>
</tr>
<tr>
<td>Slovenia</td>
<td>8</td>
<td>15</td>
<td>+7</td>
<td>Very low ratio increasing despite price decrease</td>
</tr>
<tr>
<td>Spain</td>
<td>61</td>
<td>61</td>
<td>0</td>
<td>Stable ratio despite dramatic price decrease</td>
</tr>
<tr>
<td>Sweden</td>
<td>66</td>
<td>81</td>
<td>+15</td>
<td>Very low ratio growing with price increase</td>
</tr>
<tr>
<td>Eurozone</td>
<td>49</td>
<td>52</td>
<td>+3</td>
<td>Ratio goes up while prices down</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EFTA member</th>
<th>2007</th>
<th>2012</th>
<th>Difference</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>107</td>
<td>N/A</td>
<td>?</td>
<td>Extremely high ratio</td>
</tr>
<tr>
<td>Norway</td>
<td>60</td>
<td>70</td>
<td>+10</td>
<td>Increase of ratio mirroring price increase</td>
</tr>
<tr>
<td>Switzerland</td>
<td>132</td>
<td>103</td>
<td>-29</td>
<td>Extremely high ratio going down while price goes up</td>
</tr>
</tbody>
</table>

Knowing about the residential real estate prices and their fluctuation and about the ratio of national outstanding residential mortgages loans to GDP is instructive, but still does not provide the entire picture. Indeed, the fact that the residential real estate prices are stabilized and the ratio of outstanding residential mortgages loans to GDP do not increase does not necessarily testify to a wonderful economic-social situation in the particular country. At the same time, dramatically decreasing or increasing prices and the fluctuation of the ratio do not necessarily testify to a catastrophic situation. Further, it is questionable how much should be an ideal ratio, i.e. how much should people owe to banks for their homes in comparison to GDP. Is it sustainable to own more on home than what is GDP as in the Netherlands? Is it fair, reasonable and pro-growth to see that some (often random) owners got the residential real estate for small prices without the need to get a loan, such as in the case of the selective privatization in the Czech Republic? To deeply appreciate the issue, it is mandatory to consider as well the perspective of the ultimate addresses, i.e. Europeans living in flats and houses in Europe. How many of them are owners, can be owners and never will be able to become owners?
Figure 1 shows that the ownership of residential real estate is not in correlation with the data indicated in Table 2 and Table 3. In Germany the prices went up and the ratio loans GDP down, the owner occupancy is under 50% and thus the stabilized situation means that the majority rents. In Austria the prices went up and the ratio loans GDP just slightly up, but the owner occupancy is over 10% higher than in Germany. However, in France the prices dropped, while the ratio loans increased and the occupancy is basically as in Austria, i.e. 58%. We can move on and discuss these three values for each of the indicated EEA states, but without discovering a correlation and trends generally applicable. This data beats the clichés about the harmonization ready setting, about big vs. small countries, about traditional EU states vs. new arrivals, etc. This data even does not provide conclusive statements about the stability and health of the financial and real estate markets, and about the economic, social and legal shape and preferences of EU member states. Basically, we can reach only one single conclusion, that residential lending is deeply marked by the national setting and that legal and cultural differences are further expanded by different financial, housing and social policies created and applied in a variable and dynamic manner by countries and their legislative and governmental bodies. Considering the concept, preamble and even the very wording of the MCD, it can be suggested that the EU and its organs and bodies, especially the European Commission, might not fully appreciate the complexity and diverse national particularism in this sphere.

In addition, a mere field observation in 2014 (before the MCD) and 2016 (after the MCD) demonstrates the continuation of a myriad of national particularities and strong national engravement. Housing and its financing remains a very sensitive topic and access to housing (via financial credit) is perhaps even more sensitive. Each state has a different attitude and their harmonization is clearly needed for the effective operation of the EU single internal market. No doubt about that, but is the MCD correct for that? Each EU member state was in a unique situation...
during the wave of crisis/crises after 2007 and each EU member state addresses this situation in its own particular manner, tailored to national specificities. Certain EU member states seem to do a better job than others. However, is this a good foundation for a compromising harmonization created a minimal standard setting in the manner “fit-all”?

The overview of EU member states should logically start with the strongest and most pro-integration EU member states. Doubtless, Germany was hard hit by the global 2008 crises and the following Eurozone issue challenged financial market(s) linked to Germany. However, Germany was one of a few EU member states where residential prices have moved only a few percent and residential building activities have increased between 2007 and 2012, i.e. completions and outputs were higher in 2012 than in 2007, but of course lower than in 2001 (Whitehead et al., 2014). The economic theories and policies might have a hard time explaining it, but not the legal theory and science. German housing and residential policy and other government regulations and support influenced dramatically the market, and with a touch of exaggeration it can be suggested that Germany did not hesitate to use law instruments along with quasi-subsidies to keep the situation stabilized and to avoid any yo-yo effects in the financial and real estate markets. This explains as well the German government frustration and rejection of Airbnb, see the Berlin proposed and valid privat rent regulation.

France has followed a similar pattern, but in a less pro-active and successful manner and the situation was not “under control” as in Germany. Nevertheless, still the drop was not dramatic. It might be speculated that the German, and partially as well as French, solution with a reasonable (or better to say, partial) success along with Europe 2020 provided a certain amount of inspiration, along with the common law model, and courage to the European Commission which led to the MCD.

Indeed, during the time of preparation of the MCD, from 2011 to 2014, basically each and every EU member state had been changing its own national law regarding mortgages for residential real estate. Unsurprisingly, the only common denominator was the drive towards more, rather than less, regulation of available products for mortgagors (Whitehead et al., 2014). Otherwise, each EU member state made changes pursuant its own particularities, demonstrated by the diversity of the above data. The legislation in Denmark and the Netherlands has moved to limit interest-only loans, perhaps because it seems unstabilizing and dangerous to go ahead with alluring mortgage extenstions and to have more money owned to banks to pay residential mortgages than the national GDP. The legislation in Ireland was toward fighting against loans to households in negative equity, perhaps because of the concern of the consequences of a dramatic drop in residential real estate prices. The legislation in Central Europe, e.g. in Poland and in Austria, has moved to restrict foreign currency loans and foreign exchange based loans, perhaps because of the desire to maintain the precious financial-real estate market stability, or towards not getting overly in debt to other countries, as Germany was ruined repeatedly in the 1920’s. However, there are also EU member states which did not make any significant regulatory changes during the period of discussing and drafting the MCD. Among these countries are the well stabilized Germany and Belgium, the kind of stabilized France … and the Czech Republic. Considering the deplorable situation in the Czech Republic in this respect in 2011-2014, it is surprising that there was an avoidance of any serious legislative attempts to correct the regulatory setting, see more below.

Due to all these differences, selecting one EU member state and model according to MCD, it would be extremely superficial and not justified to reject models and patterns of other EU member states. In the UK and Netherlands, the real housing price change decreased by 15% and 27% between 2007 and 2013 and the ratio of household debt to gross disposable income reached 145% and 285% (Whitehead et al., 2014). Despite these dramatic figures, the situation and market stability is relatively close to those of Germany and France. The danger of the figures is partially offset by government measures and guarantees, lenders policies, and a good debt ethic (Mak, 2015). In other words, the real estate and financial markets were effectively and efficiently linked, and their co-operation in the real life led to pragmatic solutions conservatively and ethically observed by the entire society. Indeed, the UK and Netherlands did not hesitate to promptly change the
regulatory setting and to bring clear and strict conditions, such as to limit LTV (Cvik & MacGregor, 2016). Naturally, Brexit and other new issues can bring new dynamics and the situation in the UK and Netherlands should be monitored, especially because reforms done in the wave of MCD could push lower the LTV and LTI ratios and decrease the demand for owner-occupied housing and increase the demand for rental housing (Scanlon & Elsinga, 2014).

From the common law universe, the EU might lose the UK, but still Ireland should stick around. Hence, it is relevant to remember that the issue of the dichotomy of the public law vs. private law, well known in the continental law universe, moved to the common law universe and took a special shape. In the common law universe, it appears that the public law is reformed in order to protect the consumer-mortgagor, while the private law keeps perceiving the mortgagor as landowner assumed to have the same bargaining and other powers as has the credit providers – mortgagees (Whitehouse, 2015). This perception does not reflect the reality of the 21st century and an appropriate reform of the private law is highly needed. This may not be easily understood in the common law family where pragmatism has always dominated. Yet similar conceptually misunderstanding and outdated ideas exist also in the continental law family, where pragmatism does not rule and thus it will be an uneasy task to get rid of the idea that the “mortgagors” are wealthy land- and houseowners. Nevertheless, the laic public across the EU understands the situation very well and labels mortgaging as the “modern slavery” where banks-mortgagees are strong masters having almost absolute power over landowners-mortgagors, having a decades long duty to pay amounts on the brink of their financial capacities. The common law suggestion that reform of the private law regime and pertinent rules must be undertaken with the aim of initiating a paradigm shift in the conception of the mortgagor from “landowner” to “consumer” and of recognizing the blatant and obvious truth, that mortgagors deserve “at least” as much protection as consumers buying less essential goods can get (Whitehouse, 2015) should be endorsed and this not only with respect to the UK and Ireland and their laws.

A similar pragmatism and drive to a conceptual adjustment and open-minded approach can be detected as well in Scandinavia, which, in addition, did not suffer a dramatic residential real estate price drop (Whitehead et al., 2014) and where appropriate measures were adopted on an ongoing basis by various stakeholders, including the government and, perhaps a good debt ethic contributed to it. The only exception in numbers, but not in effect and result, is in Denmark, with a real house price drop of over 30% between 2007 and 2013. (Cvik & MacGregor, 2016).

With other EU member states, especially from the South of the EU, it is another story. For example, Spain has suffered by a dramatic decrease in residential real estate prices, by the Eurozone crisis and its aftermath, see the PIGS hard sarcasm (Portugal, Italy, Greece, Spain – pigs of the Euro and Eurozone), by a dramatic increase in unemployment, by the recession and by political turmoil. Spain did not stay passive and attempt to make regulatory changes. They were perhaps correctly conceived, but unfortunately the lax enforcement (e.g., suspension of the possibility of eviction for 2 years) sealed their aborted destiny. Neighboring Portugal also had an unimpressive regulation and regulation enforcement, but in late 2012 made a turn. In contrast to Spain and Portugal, a prima facia perfectly looking Austria stayed regulatorily vigilant and active and despite the stable growth of prices and a good ratio towards GDP went ahead with a myriad of detailed rules on particular mortgage loan products. Indeed, basically all EU member states were working on their end from 2011 to 2014 to fix financial and real estate markets, to provide stability and to be pro-growth while supporting responsible lending … with the exception of the Czech Republic which had in the national reports about regulatory changes only two words to note “no change”. The Czechs somehow translated a famous American saying of “If it aint broke, don’t fix it” into “If it’s broke, don’t fix it”.

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4. RESIDENTIAL MORTGAGING AND MCD IN THE CZECH REPUBLIC

Even a very cursory look at the legal, economic and social situation in the Czech Republic during the period from 2008 to 2014 reveals that basically each and every aspect addressed and discussed during the preparation of the MCD was processed in the Czech Republic in a non compliant manner. The law did not provide a clear protection and the general provisions of the old Czech Civil Code were often interpreted in a formalistic manner and financial institutions and their intermediaries often did not extend a professional and courteous approach to customers desiring to finance residential real estate purchases and did not get seriously engaged in informing their customers and in responsible lending. Plus, early repayment was a taboo and consumers desiring to earlier repay their residential real estate or other credits were severely punished by a set of penalties and processing fees. The Czech market for residential mortgages was small and underdeveloped (see above the data demonstrating that 79% of Czech already live in residences in their ownership, and that the ratio of outstanding residential mortgage loans to GDP was extremely low – 10% and 14%) and in addition to typical issues of post-communistic restituting and privatizing markets had its own specific issues. Thus, it was basically beyond the market powers themselves to achieve a correction and the consumers were in a random, often looser, position. To make the situation even more complex, there were dramatic differences in residential mortgaging – sometimes consumers easily got finances despite their lack of income and sometimes perfect profile consumers waited for months to hear that their application was rejected, with no explanation. The abuses have occurred on both sides and the potential for it was reinforced by the information and power asymmetry, where the professionals repeatedly granting credit were on one side and the purchasers of the residences, especially first time mortgagors often pushed by their government to move from the residence category into the ownership category, on the other side. Naturally, these mortgagors were without the consumer status and protection was vulnerable, and temptations for abuses and errors by various stakeholders have emerged. They represented a small segment of the population (again 79% of the population being already served) and were basically at the mercy of credit providers. In the academic and laic press were documented many such real-life cases. A perfect example is a holistic case study of a scenario from 2013 when Modrá Pyramida in Prague 1, a member of the group of Komercní banka belonging to Société Générale Group, declined after three months to grant the pre-approved credit, to cover 20% of the price of an apartment to be purchased, by a high income consumer (who sold a smaller flat, paid down 80% of the value of the new apartment and had annual employment income exceeding the entire requested credit) without any explanations (Cvik & MacGregor, 2016). Amusingly, the consumer was one of the authors of this article, who fortunately got within 24 hours the credit from Česká spořitelna and so avoided the fine of CZK 500 000 and the rejection. By the way, later on it was figured out why the credit was declined – one employee of the Modrá Pyramida mixed the application papers and wrongly entered the data from them into the electronic system, called in sick, and her supervisor rejected any questions about her proper processing. The covering-up went all the way up, including the ombudsman of the Komercní banka making an interesting point that the pre-approval of credit is completely unbinding and that the financial institution can withdraw from it as it pleases. Therefore, the Czech customers were totally at the mercy of incompetently managed (with poorly trained underlings…”You pay peanuts, you get monkeys”) financial institutions, and could not even rely on the promise made by a financial institution to provide credit for residential mortgaging.

Logically, the adoption of the MCD was cheered by consumers, welcomed by certain credit providers and intermediaries and abhorred by others. Considering the deadline for the transposition and implementation of the MCD into national laws of EU member, 21st March, 2016, the Czech Government started to prepare a legal proposal of an Act on credit for consumers. It is beyond the scope of this article to analyze all reasons why the legal proposal was finished under No. 379 only in December 2015 and the Act on credit for consumers was adopted only on 14th June, 2016, i.e. 3 months AFTER the expiration of the deadline set by the MCD. In addition, the Act on credit for consumers will take effect on the 1st day of the 4th month following its publication, which was on
5th August, 2016. Hence the MCD will be effectively transposed through Act No. 257/2016 Coll., on credit for consumers on 1st December, 2016, i.e. 8 months too late. Nevertheless, the description of the situation in other EU members states and of the goals of the MCD along with the description of the situation in the Czech Republic makes it clear that the MCD might be considered as a formality and a mediocre compromise from Brussels by some EU member states, but definitely not by the Czech Republic. With a touch of exaggeration, it can be suggested that the Czech Republic is one of the very targets (if not the PRIME target) which the EU with MCD justly and correctly wanted to hit. There were three readings of the proposals and almost twenty members of the Czech Parliament presented their modifications of the proposal in a written form, while many other members did so in an oral form, see http://www.psp.cz/sqw/historie.sqw?o=7&t=679. The new Czech Civil Code with its preference of content over form and with its recognition of pre-contractual obligations along with this Act on credit for consumers should ultimately provide a just protection to the part of the Czech population which did not (fully) benefit by the wave of restitutions and under market price privatization of residential real estate, and which must pay often ten times more than the rest of the population (much of which that was in cahoots with the disgraced communist regime) in order to acquire residential real estate in their ownership. Indeed, the protection of consumers in the field of mortgages, the unification of legal regulations for credits for consumers and the consolidation of legal regulations regarding distribution of credit on the financial market should be reinforced.

It is highly illustrative to browse through the Act on credit for consumers and to appreciate the dynamics and waves caused by the MCD in the Czech law. Self-explanatory is already the extent of the Act on credit for consumers reaching an amazing number of provisions, often a very detailed, i.e. 179 articles. The MCD has only 50 articles, but of course 85 preamble explanatory points. In other words, the MCD recapitulates key residential mortgaging principles and rules shared at least by some EU member states and provides a robust explanation about them. After having read the MCD, the Czech legislature saw the writing on the wall, and understood that the Czech law must be dramatically changed root and branch, and ended by developing these 50 articles from the MCD and explicitly stating what especially the providers and intermediaries must satisfy and meet, and what are the sanctions if they do not do it, even in the case of residential lending. The Act on credit for consumers spends basically 100 articles defining who can provide credit for residential mortgaging, what are their requirements for professional competency of them and their personnel, how to get and lose accreditation, how to maintain trustworthiness and a duty of care, how to assess creditworthiness, what information and explanations must be provided to consumers even in the pre-contractual stage, etc. This part of the Act on credit for consumers is followed by a provision on the contract for credit for consumers and on the supervision of the Czech national bank. The Act on credit for consumer protection is included in the private law sanction included in the MCD, i.e. sanctions to be paid in favour of consumers. However, the Czech legislature showed awareness about the difficulty of consumers to get adjudication or ADR against big credit providers. Thus, the Act on credit for consumers includes provisions about administrative delicts, i.e. public law sanctions going up to CZK 5 000 000, sometimes even CZK 10 000 000 or CZK 20 000 000. These public law sanctions are imposed by the surveillance institution, the Czech national bank and, once paid, they are income to the Czech national budget. Nevertheless, the most practical and pragmatic for individual consumers will be the provisions directly reflecting the MCD – imposing the duty of care to credit providers and intermediaries (Art. 75), the duty to to assess creditworthiness of the consumers (Art. 86) with the sanction of the invalidity of credit agreement (Art. 87), the duty to explain without any delay why credit was not granted (Art. 89) and the information duty, including the pre-contractual information duty (Art. 90 et foll.). Czech consumers will certainly appreciate that the Act on credit for consumers makes the offer by credit providers irrevocable for 14 days (Art. 111), so the previous pressure is removed and consumers do not need to fear that the offer from one day will be cancelled the next day. A welcome change is as well the list of compulsory information to be included in the contract on providing credit (Art. 106) and the prohibition of tying other contracts for unrelated services to residential mortgaging (Art. 115).
However, the most revolutionary is the brand new right to early repayment without excessive, often liquidatory, fees designed to punish consumers “wanting” to escape from the tied web of the credit provider, i.e. newly creditors can ask only what MCD allows – their truly spent expenses linked to the early repayment (Art. 117). The default sanctions are getting limitations as well (Art. 122). Indeed, the Czech consumer going for residential mortgaging will now have the option to repay the credit before the expiration of the fixed period without any sanctions, the right to withdraw from the credit agreement during the period set by the law, and the right of information provided in a reasonable manner by a professional under duty to do responsible lending. In sum, czech Contracts on credit linked to residential mortgaging and entered in the violation of the two key (EU) consumer law priorititon priorities – (i) the information duty and (ii) fairness requirement – will be sanctioned as usual in the EU, by the nullity (Méndez-Pinedo, 2015). Last, but not least, the issue of the appraisal of residential real estate and the issue of the professionality of providers, intermediaries and appraisers, and their personnel can lead to interesting cases and disputes resolution.

Does this mean that the MCD might get some justified criticism in certain EU member states with already well established and locally sensitive residential mortgaging systems, while in the Czech Republic has the salvation aura? Firstly, we need to wait and see how the new Czech legislation, i.e. both the New Civil Code and the Act on credit for consumers, is applied and interpreted and to analyze the new case law. Secondly, we need to wait and see other economic and social indices and data. The Czech economy and income level (Birčiaková et al., 2014), setting and culture is dramatically different from many EU member states, especially those inspiring the MCD – UK, Ireland, Gemany, Scandinavia … Indeed, a balance of interests must be reached and it should be kept in mind that a strong protection of debtors may entail higher credit costs, since creditors must calculate using a higher risk premium and that ultimately debts must be paid as a rule (Sein & Lilleholt, 2014). It cannot be overstated that almost all EU member states and even other European countries have introduced regulatory changes about mortgage lending during the period 2010–2014 and have, as a result, gained some experience. The Czech Republic was almost the only country which has not made the regulatory changes, while having a setting with a real life application dramatically different from what the EU wants and sees as matching with Europe 2020. Facing the MCD (of forced by the MCD?) the Czech Republic went on to change by a legislative move everything and in much detail. This is a very continental law revolutionary approach which should reflect an instrument based on the pragmatic and evolutionary common law approach, i.e. MCD. How this will work in real life, and which cases will reach top judiciary and ADR bodies and how they will be decided, is a mystery in 2016, but will be reality in coming years. A very important and interesting reality, not only for Czechs going for residential mortgages and their credit providers, but as well for the Czech legal and economic science, and even the EU in general.

5. CONCLUSION

It is too early to provide the ultimate judgment about the MCD as the EU instrument for harmonizing residential mortgages made based on lessons from the 2008 crises and on Europe 2020. The European Commission cannot be denied genuine efforts and the endurance to go ahead with an endeavour for harmonizing residential mortgages in the EU, to stabilize financial and real estate markets, to reinforce responsible lending and to provide consumer protection. The EU overviewed (maybe not thoroughly) the situation in EU member states and took inspiration for the common law universe, partially as well from the continental law universe, and prepared the MCD as a Directive fitting in the bloc of directives covering, or at least touching on, consumer protection in financial services. Perhaps the EU slightly underestimated the differences in the legal, economic and residential situation in the EU members states and perhaps the MCD wording is a not perfectly conceived and worded compromise. Nonetheless, it seems that the MCD is not directly rejected by EU member states, and across the EU prevails a rather welcoming than rejecting tenor. For sure, the
MCD is partially obsolete for some EU member countries providing higher standards and better protection. To such countries definitely does not belong the Czech Republic. As a matter of fact, even if the MCD would be insignificant and needless for other EU member states (and we know that it is not true), the Czech Republic, in and of itself, would be a sufficient *raison d'être* for the MCD.

The EU and European integration is occasionally blamed to be bureaucratic and detached from Europeans. The MCD and the Czech Act on credit for consumers testify that the EU goes ahead with ambitious projects and forces EU member states to harmonize, or at least to reduce disharmonization, key principles and rules for residential mortgages in the EU, and that European consumers can truly benefit by the EU initiative, especially consumers from certain EU member states.

**REFERENCES**


COUNTRY-LEVEL EXPERIENCE
THE BALANCE SHEET UNDER POLISH REGULATIONS VERSUS THE STATEMENT OF FINANCIAL POSITION UNDER IFRS – MAIN DIFFERENCES DISCLOSED IN RATIO ANALYSIS OF ENTERPRISE

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Abstract
The development of IFRS/IAS is aiming to the unify information on the number of categories used in accounting, the implementation of uniform methods of measuring these categories. This is due to the progressive globalization processes and the creation of a single financial market all over the world. The use of IFRS/IAS is not easy and sometimes there are differences and even contradictions from the point of view of local accounting regulations. These differences are reflected in the ratio analysis of the company. The article presents the main differences between the balance sheet prepared by the Polish regulations and the statement of financial position prepared by IFRS/IAS and the resulting differences in the selected ratios of financial analysis, as the problem of ensuring comparability of financial data. The aim was to present in a clear and understandable way these differences and show that it have a huge impact on the educational value of the balance sheet and the assessment of economic situation of company. As an example, there is used financial data of one of production company from Polish market.

Keywords: balance sheet, IFRS, ratio analysis, statement of financial position

1. INTRODUCTION

Financial reporting realizes the principle of true and fair view and should strive to maintain certain quality standards such as: reliability, completeness, verifiability and accuracy (Gabrusewicz, 2005, p. 20). The development of International Financial Reporting Standards (IFRS) is aiming to the unify information on the number of categories used in accounting, the implementation of uniform methods of measuring these categories. This is due to the progressive globalization processes and the creation of a single financial market all over the world. The use of IFRS is not easy and sometimes there are differences and even contradictions from the point of view of local accounting regulations. These differences are reflected in the ratio analysis of the company.

The aim of the article is to present the differences in the presentation of financial data in the balance sheet according to the Polish regulations and the statement of financial position prepared according to IFRS and their disclosure in the ratio analysis of enterprise, as the problem of ensuring comparability of financial data.

2. FUNDAMENTAL DIFFERENCES IN THE PRESENTATION OF THE BALANCE SHEET IN POLISH REGULATIONS AND THE STATEMENT OF FINANCIAL POSITION

The fundamental differences between the solutions proposed by the international accounting standards (IFRS) and the Polish regulations reveal in the structural basis of the balance sheet, in the methods of measurement of assets and liabilities (Walińska, 2007, p. 88). This article is dedicated to that issue. There are presented the differences in the categorization of balance, and some detailed proposals for these differences are discussed in more comprehensive way. The summary of differences resulting from the application of the requirements Polish standards and IFRS are
presented in Table 1. It organizes and provides information about the mismatches occurring in practice. The table is divided into the part of Polish regulations and IFRS (Adamkiewicz, 2015, p. 38–44). Such configuration allows to make quick comparisons and find the differences.

**Table 1. Differences in the presentation of the balance sheet in Polish regulations and the statement of financial position in IFRS**

<table>
<thead>
<tr>
<th>Range of regulation</th>
<th>Polish regulation</th>
<th>IFRS/IAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right to perpetual usufruct</td>
<td>Accounting to Tangible fixed assets in use (land)</td>
<td>According to IAS 16 it is operational leasing</td>
</tr>
<tr>
<td>Depreciation of Tangible fixed assets in use</td>
<td>Allowed one-off depreciation for assets below value of 3,500 PLN</td>
<td>According to IAS 16 one-off depreciation is not allowed</td>
</tr>
<tr>
<td>Valuation of Tangible fixed assets in use in fair value</td>
<td>Not allowed</td>
<td>Allowed (IAS 16)</td>
</tr>
<tr>
<td>Write-off of impairment losses</td>
<td>By comparing balance value and sale price</td>
<td>By comparing balance value and recoverable value, that is lower of: usable value or fair value (IAS 36)</td>
</tr>
<tr>
<td>Valuation of Intangible assets by fair value</td>
<td>Not-allowed</td>
<td>Allowed (IAS 38)</td>
</tr>
<tr>
<td>Period of use of Intangible assets</td>
<td>Must be indicated</td>
<td>Might be indicated or not (IAS 38)</td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special spare parts</td>
<td>Accounting to Inventory</td>
<td>Accounting as Tangible fixed assets in use (IAS 16)</td>
</tr>
<tr>
<td>Valuation of cash in currencies</td>
<td>Valuation by average exchange rate of NBP in proper currency at the date of valuation</td>
<td>Recalculated by closing rate (IAS 21)</td>
</tr>
<tr>
<td>Presentation of Assets held for sale</td>
<td>With other assets</td>
<td>Separately (IFRS 5)</td>
</tr>
<tr>
<td>Outflows materials</td>
<td>Allowed methods:</td>
<td>Allowed methods (IAS 2):</td>
</tr>
<tr>
<td></td>
<td>1.average prices</td>
<td>1.average costs</td>
</tr>
<tr>
<td></td>
<td>2.FIFO</td>
<td>2.FIFO</td>
</tr>
<tr>
<td></td>
<td>3.LIFO</td>
<td>3.individual identification</td>
</tr>
<tr>
<td></td>
<td>4.individual identification</td>
<td></td>
</tr>
<tr>
<td>Valuation of similar inventories by the same method</td>
<td>Lack of rules</td>
<td>IAS 2 instructs valuation by the same methods</td>
</tr>
<tr>
<td><strong>Liabilities and provisions for liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities in foreign currency</td>
<td>Accounting by current sale rate of bank, but not lower than average exchange rate of NBP</td>
<td>Accounting by functional currency by exchange rate valid at the day of transaction (IAS 21)</td>
</tr>
<tr>
<td>Presentation of liabilities and passive accruals</td>
<td>Presented separately</td>
<td>Presented jointly (IAS 37)</td>
</tr>
</tbody>
</table>

As Table 1 presents, there is quite a large number of differences in the presentation of balance sheet positions/items. For the presentation of assets noteworthy are differences in valuation. In International Accounting Standard (IAS) 38 are listed examples of intangible assets Intangible assets such as computer programs, compilation contractors, licenses, franchises, relations with partners, customer loyalty. Excluded from this group are the rights to minerals and deposits, and the assets that are intended for resale, deferred tax and others (Messner, 2006, p. 135). In the case of the
valuation of intangible assets in accordance with IAS, the measurement of fair value is allowed. In the case of intangible assets IAS 36 requires an impairment test of the intangible assets that do not have a specified period of use. This test involves comparing the value from balance value to its comparable value (Jaruga, 2007, p. 39). Similar consent is the valuation of Tangible fixed assets in use. Conclusion that could be drawn is that the Polish legislation more inclined to historical valuation and international standards taking into account the changing environment the company tend to fair value, which more appropriately reflects the actual value of the assets (Walińska, 2007, p. 98, 99).

In the case of current assets differences in the presentation are not significant. An important difference is the ban in accordance with IAS consumption of materials to the LIFO method (Turyna, 2008, p. 107). In the enterprise capital can come from outside or inside sources. The difference between these approaches involves a different approach to the effects of fluctuations in asset prices and the value of liabilities (Fedak, 2007, p. 22). In the presentation of liabilities and provisions for liabilities important change is the presentation of accruals as liabilities – according to IAS. There are other, more specific differences in the presentation of the balance sheet (Winiarska, 2007, p. 48, 49). However, they do not have such a large impact on the balance of the differences presented in the statement.

3. THE COMPARISON OF THE PRODUCTION COMPANY’S BALANCE SHEET PREPARED IN ACCORDANCE WITH POLISH REGULATIONS AND AFTER CONVERSION TO INTERNATIONAL REQUIREMENTS

The article’s aim is to present the impact of differences in the presentation of the balance sheet according to Polish standards and the statement of financial position under IFRS on indicators and ratios of financial analysis. The article uses the analysis led by Dr. I. Emerling from Katowice University of Economics in publication under the title: “Balance sheet in the light of polish and international regulations – differences” published in Scientific Papers of Szczecin University in 2011. These data are presented below in Table 2 (Emerling, 2011, p. 548–557).

Table 2. The comparison of the production company’s balance sheet prepared in accordance with Polish regulations and after conversion to international requirements – assets

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Polish regulation [PLN]</th>
<th>IFRS/IAS [PLN]</th>
<th>Delta (Polish reg. vs. IFRS/IAS) [PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Fixed assets</td>
<td>1,226,272</td>
<td>1,369,180</td>
<td>-142,908</td>
</tr>
<tr>
<td>I Intangible assets</td>
<td>73,475</td>
<td>78,216</td>
<td>-4,741</td>
</tr>
<tr>
<td>1 R&amp;D expenses</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 Goodwill</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 Other intangible assets</td>
<td>73,475</td>
<td>78,216</td>
<td>-4,741</td>
</tr>
<tr>
<td>4 Advances for intangible assets</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II Tangible fixed assets</td>
<td>1,296,798</td>
<td>1,290,965</td>
<td>5,833</td>
</tr>
<tr>
<td>1 Tangible fixed assets in use</td>
<td>1,296,798</td>
<td>1,290,965</td>
<td>5,833</td>
</tr>
<tr>
<td>a) land (including right to perpetual usufruct)</td>
<td>899,815</td>
<td>899,815</td>
<td>0</td>
</tr>
<tr>
<td>b) buildings, premises, civil and water engineering structures</td>
<td>124,000</td>
<td>124,000</td>
<td>0</td>
</tr>
<tr>
<td>c) technical equipment and machines</td>
<td>153,071</td>
<td>153,538</td>
<td>-467</td>
</tr>
<tr>
<td>d) vehicles</td>
<td>48,243</td>
<td>48,243</td>
<td>0</td>
</tr>
<tr>
<td>e) other tangible fixed assets</td>
<td>51,669</td>
<td>60,369</td>
<td>-8,700</td>
</tr>
<tr>
<td>4 Tangible fixed assets held for sale</td>
<td>0</td>
<td>5,000</td>
<td>-5,000</td>
</tr>
<tr>
<td>III Long-term receivables</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### Long-term investments

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
<th>Delta (Polish reg. vs. IFRS/IAS) [PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>2,359,187</td>
<td>2,341,361</td>
<td>17,825</td>
</tr>
</tbody>
</table>

### Long-term prepayments

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>353,423</td>
<td>342,223</td>
</tr>
<tr>
<td>II</td>
<td>122,700</td>
<td>120,200</td>
</tr>
<tr>
<td>III</td>
<td>168,700</td>
<td>160,000</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Semi-fininished products and work in progress

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Finished products

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>17,825</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>11,200</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Advances for deliveries

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Short-term receivables

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1,492,619</td>
<td>1,490,735</td>
</tr>
<tr>
<td>II</td>
<td>8,658</td>
<td>6,774</td>
</tr>
<tr>
<td>a)</td>
<td>8,658</td>
<td>6,774</td>
</tr>
<tr>
<td>-</td>
<td>8,658</td>
<td>6,774</td>
</tr>
<tr>
<td>b)</td>
<td>1,483,961</td>
<td>1,483,961</td>
</tr>
<tr>
<td>a)</td>
<td>1,325,593</td>
<td>1,321,709</td>
</tr>
<tr>
<td>-</td>
<td>1,323,593</td>
<td>1,321,709</td>
</tr>
</tbody>
</table>

### Short-term prepayments

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>4,741</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>4,741</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Total Assets

<table>
<thead>
<tr>
<th></th>
<th>IFRS/IAS</th>
<th>[PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>3,709,459</td>
<td>3,710,542</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

**Table 3. The comparison of the production company’s balance sheet prepared in accordance with Polish regulations and after conversion to international requirements – liabilities**

<table>
<thead>
<tr>
<th></th>
<th>Polish regulation [PLN]</th>
<th>IFRS/IAS [PLN]</th>
<th>Delta (Polish reg. vs. IFRS/IAS) [PLN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>534,250</td>
<td>531,630</td>
<td>2,620</td>
</tr>
<tr>
<td>I</td>
<td>364,000</td>
<td>364,000</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VI</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VII</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VIII</td>
<td>170,250</td>
<td>167,630</td>
<td>2,620</td>
</tr>
<tr>
<td>IX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>3,175,209</td>
<td>3,178,912</td>
<td>-3,702</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III</td>
<td>3,175,209</td>
<td>3,178,912</td>
<td>-3,702</td>
</tr>
<tr>
<td>I</td>
<td>615,810</td>
<td>615,810</td>
<td>0</td>
</tr>
<tr>
<td>a)</td>
<td>495,810</td>
<td>495,810</td>
<td>0</td>
</tr>
<tr>
<td>-</td>
<td>495,768</td>
<td>495,768</td>
<td>0</td>
</tr>
<tr>
<td>-</td>
<td>42</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>b)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

50
Individual changes presented in the Table 2 and Table 3 are based on the following considerations:

1) Transformations on the need to include the balance sheet according to IFRS as the statement of financial position are as follows: Materials of company are valued using the LIFO method as Polish standards allowed. Outflows materials occurs at one month intervals. According to IAS 2 it is forbidden to use the LIFO method. The enterprise that would like to conduct its accounting in accordance with IFRS is obliged to use other methods permitted by these standards. IAS 2 allows to use the FIFO method (IAS 2). Therefore, the management of the company decided to use this method instead of the LIFO method. According to the valuation of FIFO method the value of materials at the balance sheet date is 120,200 PLN. The difference between the valuation of LIFO and FIFO is 2,500 PLN. This amount results from the calculation of the difference between the amount of 122,700 PLN and 120,200 PLN. The amount of 2,500 PLN will be reduced by the value of materials and at the same time reduced the amount of the financial result – due to the lack of finished products that all have been sold, therefore the used materials affect the financial result.

2) The second change involves the valuation of R&D expenses. The R&D expenses in the amount 4,741 PLN, that was included in the account Cost accruals. In the moment of their completion, the company planned to transfer them to the account “Intangible assets”. According to IAS 38, the company proved that (IAS 38):
- the ability to complete part of Intangible assets and the purpose for use or sale;
- the ability to use or sell part of Intangible assets;
- the way in which future Intangible assets will generate probable future economic benefits;
- the availability of resources (technical, financial and others), which will serve the completion of the R&D and to use or sell Intangible assets
- the ability to measure reliably the expenditure during the R&D, that is directly attributable to “Intangible assets”;
Therefore as above the company should recognize R&D expenses as part of Intangible assets (Gabrusewicz, 2005, p. 54, 55).

3) The third change relates to the recognition of spare parts. The company in position of Semi-finished products and work in progress showed parts manufactured by the company and used for the needs of sudden failure. The value of Inventory constituting spare parts is 8,700 PLN. In accordance with IAS 16, spare parts and maintenance of the expected life of over 12 months are classified as Tangible fixed assets in use (IAS 16). According to the need to change the presentation of these assets in the balance sheet of the company.

4) The fourth change is associated with the sale of the asset. The company plans to sell an asset belonging to the category of technical equipment and tools at the initial value of 20,000 PLN. The depreciation at the beginning of the year of balance sheet was amounted to 15,000 PLN. Depreciation in the current period was 3,000 PLN. The decision to sell the asset was taken at the beginning of the period. According to IFRS 5, assets that are held for sale are shown as a separate item and the company should stop their depreciation. Accordingly, the assets held for sale and presented in the original balance sheet in the amount of 2,000 PLN (20,000 – 15,000 – 3,000) will
be included in the amount of 5,000 PLN. This amount does not include depreciation for the current year. Therefore the financial result will be increasing by 3,000 PLN, because it is a reversal of depreciation affecting to it.

5) Another change comes from the fact that the company plans to sell a commitment included in the group of the liabilities. According to the Polish law on accounting liabilities are measured at the amount payable. The value of liability is 7,000 PLN. The decision of selling was taken at the beginning of the period. In accordance with IFRS liabilities held for sale should be presented as a separate group, so the amount of 7,000 PLN decreases the position of other commitments/liabilities, and will create a new category of Liabilities held for sale.

6) The next change is due to the acquisition last month of the period the computer at the value of 3,000 PLN. According to the tax regulations, whose value does not exceed 3,500 PLN can be depreciated once. In accordance with IAS 16 there is not allowed to make one-time depreciation. Therefore, the computer should be recognized as an asset in Tangible fixed assets in use, and the financial result should be increased by the amount of 3,000 PLN.

7) The changes also requires recognition of receivables from supplies and services that the company has shown in foreign currency in the amount of 20,000 EUR valued at the average exchange rate of NBP on the date of balance sheet (4.1724 EUR/PLN), resulting in the balance of the amount of 83,448 PLN. In accordance with IAS 21, receivables should be valued at the closing rate constituting the immediate exchange rate at the balance sheet date (IAS 21). The company uses the services of the commercial bank, which the purchase rate per the balance sheet date amounted to 4.0782 EUR/PLN, therefore the amount of receivables from supplies and services is 81,564 PLN. The difference from the valuation 1,884 PLN (83,448 PLN – 81,564 PLN) will provide financial costs and will affect the financial result.

8) Another change is also due to the different level of the exchange rate. In position Trade liabilities company presented a liability in foreign currency amounting 32,000 EUR valued according to the average NBP exchange rate at the balance sheet date, which amounted 4,1724 EUR/PLN, which gave liabilities in the balance sheet at the level of 133,516.80 PLN. In accordance with IAS 21, liabilities should be valued at the closing rate constituting the immediate exchange rate at the balance sheet date. The company uses the services of the commercial bank, which the purchase rate per the balance sheet date amounted to 4.2881 EUR/PLN, therefore the value of liabilities from supplies and services Trade liabilities is 137,219.20 PLN. The difference from valuation is 3,702.40 PLN (137,219.20 PLN – 133,516.80 PLN). The liabilities will be increased on the exact amount. At the same time the financial result will be reduced on that amount.

9) The last change resulted in a purchase of production machine at the beginning of the period. The value of the asset amounted to 10,000 PLN. The company depreciates this asset during five years period, therefore the depreciation in the periods is 2,000 PLN. However, the machine includes an significant part of the value of 4,000 PLN. IAS 16 states that each part of single tangible asset in use, that has significant purchase price or manufacturing cost in comparison with the purchase price or manufacturing cost of the whole balance position, should be depreciated separately. According to that rule, the part of machine at the value of 4,000 PLN should be depreciated separately. The period of its use is planned for 3 years. Therefore, the depreciation of this part is 1,333.33 PLN. The of the rest of that machine at the start value 6,000 PLN (10,000 – 4,000 PLN) will be depreciated for 5 years with yearly depreciation amounted 1,200 PLN. Thus the total depreciation is 2,533.33 PLN, as a result of sum: 1,333.33 PLN + 1,200 PLN. Originally depreciation was 2,000 PLN, however as a result of adaptation to IAS by the amount of 533.33 PLN the value of Tangible fixed assets in use and financial result would be reduced.

Realized changes allowed to convert the balance sheet prepared in accordance with Polish regulations to the statement of financial position under IFRS/IAS. The value of total assets and liabilities have changed by the amount of 108,077.33 PLN. As was demonstrated by the example, the changes has a great importance for the value of total assets and liabilities, and in the same time
for the assessment of the economic situation of the company, which will be presented in the next chapter of that article with the use of a few ratios (Bednarski, 1998, p. 21–46).

4. THE COMPARISON OF ASSESSMENT OF THE FINANCIAL SITUATION OF COMPANY BASED ON THE BALANCE SHEET UNDER POLISH REGULATION AND THE STATEMENT OF FINANCIAL POSITION UNDER IFRS

To clearly compare the differences between individual financial ratios based on statement by Polish and international regulations (Micherda, 2006, p. 6–21), there was presented Table 4 below.

Table 4. The comparison of financial ratios from the different types of balance sheet

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
<th>Under Polish regulations</th>
<th>Under IFRS/IAS</th>
<th>Difference (Polish reg. vs. IFRS/IAS) [scalar]</th>
<th>Difference (Polish reg. vs. IFRS/IAS) [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return of Assets</td>
<td>Net profit/Total assets</td>
<td>0.0459</td>
<td>0.0452</td>
<td>0.0007</td>
<td>1.57%</td>
</tr>
<tr>
<td>Return of Equity</td>
<td>Net profit/Equity</td>
<td>0.3187</td>
<td>0.3153</td>
<td>0.0034</td>
<td>1.05%</td>
</tr>
<tr>
<td>Total debt</td>
<td>Total Liabilities/Total Assets</td>
<td>0.8560</td>
<td>0.8567</td>
<td>-0.0007</td>
<td>-0.09%</td>
</tr>
<tr>
<td>Coverage of Assets by Equity</td>
<td>Equity/Assets</td>
<td>0.1440</td>
<td>0.1433</td>
<td>0.0007</td>
<td>0.52%</td>
</tr>
<tr>
<td>Engagement of Equity</td>
<td>Equity/Fixed Assets</td>
<td>0.4357</td>
<td>0.3883</td>
<td>0.0474</td>
<td>10.88%</td>
</tr>
<tr>
<td>Gold Balance Rule</td>
<td>Constant capital/Fixed Assets</td>
<td>0.4357</td>
<td>0.3883</td>
<td>0.0474</td>
<td>10.88%</td>
</tr>
<tr>
<td>Stability of Financing</td>
<td>Constans Capital/Total Liabilities</td>
<td>0.1440</td>
<td>0.1433</td>
<td>0.0007</td>
<td>0.52%</td>
</tr>
<tr>
<td>Capital immobilization</td>
<td>Fixed Assets/Total Assets</td>
<td>0.3306</td>
<td>0.3690</td>
<td>-0.0384</td>
<td>-11.62%</td>
</tr>
<tr>
<td>Current liquidity</td>
<td>Current Assets/(Short-term Liabilities)</td>
<td>0.7430</td>
<td>0.7365</td>
<td>0.0065</td>
<td>0.87%</td>
</tr>
<tr>
<td>Quick liquidity</td>
<td>(Current Assets - Inventory)/(Short-term liabilities)</td>
<td>0.6317</td>
<td>0.6289</td>
<td>0.0028</td>
<td>0.45%</td>
</tr>
</tbody>
</table>

Changes in valuation methods have a significant impact on the value of each balance sheet position at the balance sheet date. Classification of R&D expenses as a part of Intangible assets does not change the total value of assets and liabilities, however it does affect the structure ratios (Total debt, Coverage of Assets by Equity, Engagement of Equity, Gold Balance Rule, Stability of Financing, Capital immobilization). Similar consequences are in the case of changes resulting from the third assumption mentioned in the previous chapter of the article.

Changes in the structure of assets and changes in used depreciation methods have an impact on the differences in the liquidity ratios, which differ by about 0.5–1.0% in realized analysis compared Polish and international regulations.

The classification of Tangible fixed asset in use as held for sale and liabilities held for sale does not affect the value of total assets. However it make the balance sheet more detailed giving a fuller picture of the economic situation of company. Distinction of discontinued activities in the balance sheet allows for more comprehensive analysis of the potential development of company.
Differences in the one-off depreciation directly affect the financial results. Therefore for the assessment of the economic and tax issues are crucial. Changes in the level of financial result and asset structure have an impact on profitability ratios, which vary by approx. 1.0–1.5%.

It should be emphasized, that the presented assumptions and resulting changes are just an example of discrepancies between local and international solutions, which for companies with various core business and various scale of business may be much more significant.

**SUMMARY**

The article presents the main differences between the balance sheet prepared by Polish regulations and the statement of financial position prepared by IFRS/IAS and the resulting differences in the selected ratios of financial analysis. The aim was to present in a clear and understandable way these differences and show that it have a huge impact on the educational value of the balance sheet and the assessment of economic situation of a company.

There should be noted the wide range of disparities and the need for continuous verification of legal norms and standards. Discrepancies presented in the article also give an expression of necessity to update the knowledge in this field in order to properly present the financial statements in accordance with “true and fair view” principle, which should be very important in the management of each company.

In this field it is very important to provide substantive comparability of financial statements as a condition of usefulness of financial reporting for its users. It requires the adoption of a uniform description of the accounting and a uniform valuation methods. The current differences and a certain flexibility in the creation of accounting policies generate greater responsibility of auditors to ensure the reliability and comparability of the valuation of financial statement positions. At the same time, it seems that both the auditors and the other parties reading the financial statements do not have sufficient support from IFRS/IAS to enable them to control the valuation of assets and liabilities, when the data used for valuation does not come from an active (alive) markets (Burzym, 1992). Thus, according to the authors, it is necessary to tighten the requirements for disclosures about defined pricing models and values of parameters. The comparability of financial statements based on fair value would be certainly on a higher level, if IFRS/IAS allowed for a closed range of estimation methods with giving specific references, when it should be used a given set. The most important question that should be put in this place, is whether there is at all possible to develop a closed set of valuation techniques and methods that: firstly – will be widely accepted, and secondly – will be relevant to the valuation of all assets and liabilities? It seems that nowadays there is impossible.

**REFERENCES**


INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) AND AN ISSUE OF COMPARABILITY OF ASSESSMENTS OF FINANCIAL STANDING OF THE COMPANIES LISTED ON THE WARSAW STOCK EXCHANGE MADE BY THE AUDITORS IN THE REPORTS ON THE AUDIT OF THE FINANCIAL STATEMENTS

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Abstract
The aim of the paper is to investigate the practice of financial auditors with regard to application of financial ratios when performing statutory audit. Empirical examination shows that there is no widely accepted list of financial ratios recommended for usage by auditors. Furthermore there is no widely accepted formulas for calculating financial ratios. In many cases auditors don’t report ratios’ formulas in auditor report and if presented, financial ratios were calculated using different formulas. The results of the study shows lack of comparability between auditors’ reports what potentially may cause interpretation problems with regard to evaluation of financial condition of the audited entity. Moreover the study shows that the most commonly used financial ratio is current ratio.

Keywords: financial statement audit, financial ratios, current ratios

1. INTRODUCTION

Listed companies are frequently described as public companies and in majority of the countries all over the world they fall within the most important companies in a particular country in the context of the economic growth of the particular country. For many years, as a result of the ongoing process of the financial market globalization efforts have been made at developing uniform financial reporting standards by the most important international institutions. However, it is not, contrary to appearances, an easy task due to a great cultural, historical, economic and also political differences between the countries with two main accounting models, which are the Anglo-Saxon and continental one (Alexander, Nobes, 2010). The problem concerns, first of all, discrepancies in the accounting principles between the United States and Continental Europe, that is the differences which are between the American financial accounting standards (US GAAP – US General Accepted Accounting Principles) and the International Accounting Standards, which have been developed under the name of the International Financial Reporting Standard – IFRS for the last years. Intensive works have been conducted recently jointly by IASB (International Accounting Standard Board) and FASB (Financial Accounting Standard Board), and those works are to result in developing joint proposals of changes in financial reporting (Murray, 2010, pp. 623–633; Cunningham, 2010, pp. 34–35; Ohlson et al., 2010, pp. 473–474). Problems connected with performance of this project prove that the achieved level of harmonization of financial reporting principles and standards in a form of the International Financial Reporting Standard is also a result of compromise and not all countries which use those principles are satisfied fully with them. One of the visible effects of this compromise is a fact that in IFRS there are no uniform forms for particular elements of a financial statement which include, among other things, a form of a balance sheet, a profit and loss account, and also a cash flow.
statement. According to the Authors, when there is a need to compare financial standing of the companies, lack of uniform forms of the financial statements has an influence on issues connected with comparability of the results obtained from the financial analysis. Indicators calculated by the auditors in their audit reports are one of the areas in which data comparability should be expected. The Authors make a hypothesis of lack of comparability of the indicators calculated by the auditors, which are included in the financial statement audit reports in the case of the companies using the International Auditing Standards.

In Poland, pursuant to the provisions of the Accounting Act the listed companies making consolidated financial statements are obliged to use IFRS-s. For this reason, in order to verify the hypothesis made a selected sample of the companies listed on the Warsaw Stock Exchange will be chosen and cognitive values of the indicators which are calculated by the auditors to evaluate their financial standing will be examined.

An aim of the paper is to examine the factors which influence comparability of financial data which are basis of evaluating the financial standing of the listed companies made by the auditors while performing a mandatory audit of their financial statements. Deduction and deepened inference methods, as well as literature studies, and also the methods of an analysis of the empirical data obtained from the financial statements of the listed companies will be used in the paper.

2. RESEARCH METHODOLOGY AND A DESCRIPTION OF THE RESEARCH SAMPLE

Conclusions on the analytical part of the reports on auditing the financial statements by the auditors are presented in this paper. Reports on auditing the financial statements of 20 construction companies listed on the Warsaw Stock Exchange were analyzed. Considerations were conducted on basis of the unit financial statements of the entities in question with a report and an auditor’s opinion about the audit of that financial statement for years 2010–2014. The financial documents of the following entities were used in the analysis: ABM Solid, AWBUD, Budimex, Budopol Wrocław, CFI (former Intakus), CNT (former Energopol Południe), Dekpol, Elektrobudowa, Elektrotim, Elkop, Energoaparatura, Energomontaż Południe, ERBUD, Herkules (former Gastel Żurawie), Instal Kraków, Interbud, Mostostal Płock, Mostostal Eksport, Polimex – Mostostal, Projekt. In the case of some companies mentioned above the opinions and financial statement audit reports were only available in the selected analyzed years (what resulted, among other things, from a refusal of issuing the opinion by the auditor, withdrawing from public trading or going public on the Warsaw Stock Exchange in the analyzed period), that is why 74 reports on auditing the financial statements were analyzed finally. The opinions and reports mentioned were prepared by 18 auditor’s firm out of which Deloitte Polska (former Deloitte Audyt) was the most strongly represented – 16 reports, Polinvest-Audit – 7 reports, TPA HorwathHorodkoAudit – 6 reports, HLB M2 Audyt – 6 reports.

An objective of the analyses made was to verify a set of the indicators of the economic-financial analysis, and their definitions, used in the works of the auditors. Preliminary analyses of the financial statements presented in the reports and other tools used by the auditors while evaluating financial standing of the business entities audited (including verification of a threat to business activity continuity by the audited companies) were also evaluated.

Preliminary, indicator and general analysis of financial standing
An analytical balance sheet and a profit and loss account of the business entities in question were presented in a part (52.7% out of total) of the evaluated reports. Calculations explaining a structure and dynamics of the presented data (in majority of cases the analysis included last 3 years) are presented in tables. Only in three cases (out of 74) of the discussed reports the analysis was completed with the evaluation of the financial standing of the audited entity seen from the angle of a cash flow statement.
In 25 out of the audit reports analyzed only selected items of the balance sheet and the profit and loss account were presented. In other 10 cases elements of the preliminary analysis of the financial statements were not presented.

A wider or narrower indicator analysis which constitutes an expansion of the preliminary analysis of the financial statement, can be found in all the reports analyzed. In the presented analyses sets from 4 to 27 indicators were presented. However, in a greater part of the reports analyzed, in as many as 30 cases, no definitions of the used indicators were provided. Other reports provided approximate definitions of the measures in question, although it should be emphasized that the presented definitions differed quite often from one another (this issue was discussed on the selected indicators in the further part of this paper).

The indicators used in the reports in question are presented in the table below (17 measures which appeared minimum in 10 reports analyzed are presented). Apart from the indicators mentioned in the table in single reports (from 1 to 9) there were 34 other measures created for needs to evaluate financial standing of the business entities in question (among other things: a debt to equity ratio – 6 reports, an asset turnover ratio – 7 reports, net working capital on trading – 4 reports, liabilities turnover ratio – 1 report).

As it can be noticed there is no economic-financial analysis indicator which would be present in all the analyzed reports. The current financial liquidity ratio appeared the most frequently in the presented analysis (98.6% of the cases, the ratio was not present in one of the evaluated reports). In two reports there was no return on equity, whereas in four ones – collection period of short-term receivables.

In the tables below next to the information about frequency of occurrence of a particular indicator it is also provided if the indicator mentioned was defined in the report in question, or not (quantitatively or in percentage with reference to frequency of occurrence).

Table 1. A list of the indicators of the economic-financial analysis present in the analytical parts of the reports on the financial statements audits by the auditors

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Frequency of occurrence</th>
<th>Frequency of occurrence (in %)</th>
<th>Definition</th>
<th>No definition</th>
<th>Percentage of reports with defined indicator</th>
<th>Percentage of reports without defined indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current financial liquidity ratio</td>
<td>73</td>
<td>98.6%</td>
<td>44</td>
<td>29</td>
<td>60.3%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Net return on equity</td>
<td>72</td>
<td>97.3%</td>
<td>44</td>
<td>28</td>
<td>61.1%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Collection period of receivables on</td>
<td>70</td>
<td>94.6%</td>
<td>42</td>
<td>28</td>
<td>60.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Cycle of deferment of payment of liabilities</td>
<td>68</td>
<td>91.9%</td>
<td>41</td>
<td>27</td>
<td>60.3%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Return on net sales</td>
<td>65</td>
<td>87.8%</td>
<td>45</td>
<td>20</td>
<td>69.2%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Increased liquidity ratio</td>
<td>64</td>
<td>86.5%</td>
<td>35</td>
<td>29</td>
<td>54.7%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Return on sales measured by profit on sales</td>
<td>60</td>
<td>81.1%</td>
<td>32</td>
<td>28</td>
<td>53.3%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Rate of inventory turnover</td>
<td>55</td>
<td>74.3%</td>
<td>30</td>
<td>25</td>
<td>54.5%</td>
<td>45.5%</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>52</td>
<td>70.3%</td>
<td>28</td>
<td>24</td>
<td>53.8%</td>
<td>46.2%</td>
</tr>
<tr>
<td>Net return on assets</td>
<td>47</td>
<td>63.5%</td>
<td>41</td>
<td>6</td>
<td>87.2%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Sustainability of financing</td>
<td>34</td>
<td>45.9%</td>
<td>31</td>
<td>3</td>
<td>91.2%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Net working capital</td>
<td>29</td>
<td>39.2%</td>
<td>9</td>
<td>20</td>
<td>31.0%</td>
<td>69.0%</td>
</tr>
<tr>
<td>Cash liquidity ratio</td>
<td>27</td>
<td>36.5%</td>
<td>27</td>
<td>0</td>
<td>100.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Assets productivity</td>
<td>26</td>
<td>35.1%</td>
<td>10</td>
<td>16</td>
<td>38.5%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Golden (silver) balance sheet rule</td>
<td>26</td>
<td>35.1%</td>
<td>22</td>
<td>4</td>
<td>84.6%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Equity to assets ratio</td>
<td>21</td>
<td>28.4%</td>
<td>5</td>
<td>16</td>
<td>23.8%</td>
<td>76.2%</td>
</tr>
<tr>
<td>Receivables to payables ratio</td>
<td>11</td>
<td>14.9%</td>
<td>10</td>
<td>1</td>
<td>90.9%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration
In majority of the analyzed reports shorter or longer comments were added to the presented indicators. In one case only there were no comments to the presented analytical indicators. Some parts of the analyses were relatively poor – for example it was indicated comparing to the previous year: “... an increase in net return on equity; shortening of rotation of cycle of receivables and liabilities as of; a decrease in the net working capital; a decrease in the liquidity ratios.”

Some parts of the presented considerations were very superficial, and what rather strongly simplified economic reality. For example in one of the reports a positive value of the return on equity (ROE) at the simultaneous loss generated by the analyzed enterprise was left without any comments. This situation resulted from a simultaneous negative value of the equity and this value is present in the denominator of the ratio mentioned. In another case the current financial liquidity ratio being at 0.00 level (at the same time the auditor issued an unqualified opinion) was left without any comments. In some cases there were simple calculation errors – for example the current financial liquidity ratio being 0.9% instead of 0.93 (or 93%).

On the other hand, in dozen cases, the presented analyses were supported with diagram and wide comments. Only in 11 cases, in tables presenting the definitions and the values of the indicators, there were also normative values (or desired trends) of those analytical measures presented.

However, in the performed analyses, there were no references to trade standards, although they are available in the “Rachunkowość” Journal, where the trade indicators are published annually by the Financial Analysis Board of the Association of Accountants in Poland¹ (examples of the average and median values of the selected analytical indicators for the construction enterprises for year 2014 are presented in the tables below – sections PKD(Polish Classification of Business Activity): 41 – Construction works related to erecting buildings; 42 – Works related to construction of buildings and civil engineering structures; 43 – Specialized construction works). While commenting an ability to continue business operations the auditors did not use the existing discriminant models (for example the model of the co-author of this paper se Maślanka, 2012b), which could indicate (or not) the existing threats (Andrzejewski, Maślanka, 2015, pp. 49–59).

Table 2. Definitions of the selected analytical indicators published by the Financial Analysis Board of the Association of Accountants in Poland

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liquidity ratio</td>
<td>(current assets – trade receivables maturing over 12 months) / (short-term liabilities – trade liabilities, maturing over 12 months + short-term provisions + short-term accruals)</td>
</tr>
<tr>
<td>Increased liquidity ratio</td>
<td>(current assets – trade receivables maturing over 12 months– stocks – prepayments) / (short-term liabilities – trade liabilities, maturing over 12 months + short-term provisions + short-term accruals)</td>
</tr>
<tr>
<td>Return on equity</td>
<td>(net result * 100) / average annual equity balance</td>
</tr>
<tr>
<td>Return on net sales</td>
<td>(net result * 100) / total revenues</td>
</tr>
<tr>
<td>Cycle of deferment of payment of liabilities</td>
<td>(average annual balance of trade liabilities maturing to o 12 months * 365) / revenues from sales of products, goods and materials</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration on basis of “Zestawienie średnich wartości podstawowych wskaźników finansowych dla poszczególnych sektorów (branż) rok 2014” (Specification of average values of the basic financial indicators for particular trades year 2014), http://rachunkowosc.com.pl, (access date: 4.08.2016)

¹http://rachunkowosc.com.pl (access date: 4.8.2016)
Table 3. The average and median values for year 2014 of the selected analytical indicators in the analyzed PKD (Polish Classification of Business Activity) sections including construction activities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>section 41</th>
<th></th>
<th>section 42</th>
<th></th>
<th>section 43</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>average</td>
<td>median</td>
<td>average</td>
<td>median</td>
<td>average</td>
<td>median</td>
</tr>
<tr>
<td>Current liquidity ratio</td>
<td>2.84</td>
<td>2.04</td>
<td>2.38</td>
<td>1.81</td>
<td>2.45</td>
<td>1.92</td>
</tr>
<tr>
<td>Increased liquidity ratio</td>
<td>1.79</td>
<td>1.31</td>
<td>1.99</td>
<td>1.55</td>
<td>2.07</td>
<td>1.60</td>
</tr>
<tr>
<td>Cash liquidity ratio</td>
<td>0.77</td>
<td>0.37</td>
<td>0.91</td>
<td>0.44</td>
<td>0.69</td>
<td>0.38</td>
</tr>
<tr>
<td>Return on equity (%)</td>
<td>9.90</td>
<td>17.77</td>
<td>4.86</td>
<td>11.07</td>
<td>18.70</td>
<td>12.41</td>
</tr>
<tr>
<td>Return on sales (%)</td>
<td>5.05</td>
<td>2.46</td>
<td>4.33</td>
<td>2.91</td>
<td>4.58</td>
<td>3.17</td>
</tr>
<tr>
<td>Cycle of deferred payment of liabilities</td>
<td>46.63</td>
<td>37.98</td>
<td>45.00</td>
<td>37.85</td>
<td>46.71</td>
<td>40.01</td>
</tr>
</tbody>
</table>


The selected methodological issues related to constructing the most frequently used analytical indicators used by the auditors will be presented in the further part of this paper. The comments will apply to the following indicators: the current liquidity ratio, the increased liquidity ratio, the cash liquidity ratio, return on equity (ROE), return on sales (ROS) and the cycle of deferment of payment of short-term liabilities.

Financial liquidity ratios
The indicator which appeared the most frequently in the reports on the financial statement audit in question (73 out of 74 analyzed reports) was the current financial liquidity, also called the liquidity ratio of I degree. This fact should not be surprising because as the studies show (Maślanka, 2012a) this measure is characterized by high individual effectiveness in the unequivocal evaluation of financial standing of an enterprise. However, it is rather surprising that, especially, in the context of existence of guidelines in a form of the Standards of performing a profession of the auditors, this ratio is defined ambiguously or its definition is omitted (in 39.7% cases of presence of the current financial liquidity ratio).

In 25 analyzed reports (34.2%) this ratio was defined according to a textbook (Czekaj, Dresler, 2002), that is by dividing the current assets by the short-term liabilities. In other cases of presence of the current financial liquidity ratio (26.0%) in the reports there was an attempt to specify, to greater or lesser extent, the information included in the numerator and denominator of this measure, for example, by allowing themselves some room to maneuver while computing, dividing the current assets by the current liabilities. However, in a few cases it was made inconsistently by specifying the information only in the numerator or only in the denominator of the ratio what resulted in forming a definition where next to a balance sheet category a management category appeared (for example: the current assets divided by the current liabilities). In 12 analyzed reports on the financial statement audit (that is 16.4% of the cases of presence of the current liquidity ration) particular items of the assets or short-term liabilities which were recognized by determining a value of this ratio (the definitions are presented in the table below), were mentioned. Such an approach is closest to the solutions proposed, for example in a publication of Sierpińska and Jachna (2004).
Table 4. Definitions of the current financial liquidity ratio selected from the reports on the financial statement audit by an auditor

<table>
<thead>
<tr>
<th>Name of a ratio</th>
<th>Frequency of occurrence</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial liquidity of I degree</td>
<td>4</td>
<td>current assets - trade receivables and services over 12 months</td>
<td>short-term liabilities - trade liabilities and services over 12 months</td>
</tr>
<tr>
<td>Current liquidity</td>
<td>6</td>
<td>provisions + short-term receivables + cash + accruals generating cash flows</td>
<td>short-term liabilities + accruals generating expenses</td>
</tr>
<tr>
<td>Liquidity of I degree (current)</td>
<td>2</td>
<td>current assets - trade receivables over 12 months - short-term accruals</td>
<td>short-term provisions + - trade liabilities over 12 months</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

Other indicators used in evaluating the financial liquidity were present less rarely in the analyzed reports on the financial statement audit – that is the increased liquidity ratio in 64 reports (86.5% of total), whereas the cash liquidity ratio in 27 (36.5%). In the case of the increase liquidity ratio its more or less apt definition appeared in 35 cases (what constitutes 54.7% of the reports where the mentioned ratio is present). While the cash liquidity ratio (III degree) was defined as the only one in all the reports in question. As far as the increased financial liquidity ratio is concerned in 18 cases its definition is as follows: (current assets – provisions) / short-term-liabilities. In 5 cases in the mentioned indicator besides the balance sheet categories (current assets, short-term liabilities) we can find management categories (current assets or current liabilities) what constitutes an inconsistency. In 12 analyzed reports a numerator or a denominator of the indicator in question was specified, what is presented in the table below.

Table 5. Definitions of the increased financial liquidity selected from the reports on the financial statement audit by the auditor

<table>
<thead>
<tr>
<th>Name of indicator</th>
<th>Frequency of occurrence</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial liquidity of II degree</td>
<td>4</td>
<td>current assets - provisions - accruals - trade receivables and services over 12 months</td>
<td>short-term liabilities - trade liabilities and services over 12 months</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>6</td>
<td>short-term receivables + short-term financial assets + accruals generating cash flows</td>
<td>short-term liabilities + accruals generating expenses</td>
</tr>
<tr>
<td>Liquidity of II degree (increased)</td>
<td>2</td>
<td>current assets - provisions - trade receivables over 12 months - short-term accruals</td>
<td>short-term provisions + short-term liabilities - trade liabilities over 12 months</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

A variety of the definitions can be also found while analyzing the cash liquidity. Some examples are presented in the table below.

---

2 An inconsistent approach in relation to the definition of the current liquidity ratio where there was cash instead of the short-term financial assets.
Table 6. Definitions of the increased cash liquidity selected from the reports on the financial statement audit by the auditor

<table>
<thead>
<tr>
<th>Name of indicator</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity ratio III</td>
<td>cash</td>
<td>short-term liabilities</td>
</tr>
<tr>
<td>Financial liquidity of III degree</td>
<td>short-term investments</td>
<td>short-term liabilities - trade liabilities and services over 12 months</td>
</tr>
<tr>
<td>Accelerated liquidity</td>
<td>cash + short-term financial assets</td>
<td>short-term liabilities</td>
</tr>
<tr>
<td>Liquidity ratio of III degree</td>
<td>current assets - provisions - receivables</td>
<td>short-term liabilities + accruals of revenues + provisions</td>
</tr>
<tr>
<td>Liquidity ratio III</td>
<td>cash and other monetary assets</td>
<td>current liabilities</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

Profitability ratios

There are less methodological discrepancies when the used profitability ratios are defined. The return on equity ratio (ROE) appears in the reports of the auditors as frequently as (97.3%) the current financial liquidity ratio. Unfortunately, as frequently as in the case of the current liquidity ratio a definition of this ratio cannot be found in the analyzed reports (38.9% among the reports in which the ROE ratio is present). In other cases the proposed definitions differed from one another by including the equity in the denominator (for example we can find: equity at the beginning of the period, the mean value of the equity, or the equity at the end of the period – recognition of the denominator in the analyzed ratio is presented in the table below).

Table 7. The selected definitions of the ROE ratio (the ratio denominator) in the analyzed reports on the financial statement

<table>
<thead>
<tr>
<th>ROE ratio denominator</th>
<th>Number of reports</th>
<th>Percentage share of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No definition</td>
<td>28</td>
<td>38.9%</td>
</tr>
<tr>
<td>Equity at the end of the period</td>
<td>14</td>
<td>19.4%</td>
</tr>
<tr>
<td>Equity at the end of the period minus financial results</td>
<td>8</td>
<td>11.1%</td>
</tr>
<tr>
<td>Average equity</td>
<td>10</td>
<td>13.9%</td>
</tr>
<tr>
<td>Average equity without profit</td>
<td>6</td>
<td>8.3%</td>
</tr>
<tr>
<td>Equity at the beginning of the period</td>
<td>6</td>
<td>8.3%</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

In 65 of the analyzed audit reports the return on sales was used. In the case of this measure there are no methodological problems with defining the numerator – we find the net financial result (providing that the ratio definition was given). A detailed set of the economic categories which can appear in the denominator is presented below.

Table 8. The selected definitions of the ROS ratio (the ratio denominator) in the analyzed reports on the financial statement audit

<table>
<thead>
<tr>
<th>ROS ratio denominator</th>
<th>Number of reports</th>
<th>Percentage share of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No definitions</td>
<td>20</td>
<td>30.8%</td>
</tr>
<tr>
<td>Total revenues</td>
<td>4</td>
<td>6.2%</td>
</tr>
<tr>
<td>Operating income</td>
<td>2</td>
<td>3.1%</td>
</tr>
<tr>
<td>Net revenues from sales of products and goods</td>
<td>13</td>
<td>20.0%</td>
</tr>
<tr>
<td>Net revenues from sales</td>
<td>26</td>
<td>40.0%</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration
Cycle of deferment of payments of short-term liabilities

The indicators of asset utilization which include, among other things, a cycle of deferment of payments of short-term liabilities are connected with numerous problems of a methodological character. All the items present in the definition of the indicator mentioned can be replaced with other similar economic categories. For example, in the numerator there are trade liabilities and services which can be recognized according to their balance at the end of the audited period or according their average value. A number of days in the period which also appears in the numerator of the indicator in question, is not always specified (you can often find an entry: a number of days in the period), and when it is provided, it often happens that it is 360 or 365 days (without mentioning working days in the period). There is a great variety in the nominator where you can find for example: operating expenses, prime costs of sale or revenues from sales of products, goods and materials.

Table 9. A cycle of deferment of payment of liabilities – statistics on presenting the information about liabilities in the analyzed reports of the financial statement audit

<table>
<thead>
<tr>
<th>Specification</th>
<th>Number of reports</th>
<th>Percentage share of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No definition</td>
<td>27</td>
<td>39.7%</td>
</tr>
<tr>
<td>Trade liabilities and services at the end of the period</td>
<td>11</td>
<td>16.2%</td>
</tr>
<tr>
<td>Average balance of trade liabilities and services</td>
<td>30</td>
<td>44.1%</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

Table 10. A cycle of deferment of payments of liabilities – statistics on presenting the information about a number of days in period in the analyzed reports on the financial statement audit

<table>
<thead>
<tr>
<th>Specification</th>
<th>Number of reports</th>
<th>Percentage share of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No definition</td>
<td>27</td>
<td>39.7%</td>
</tr>
<tr>
<td>A number of days in the period (t)</td>
<td>12</td>
<td>17.6%</td>
</tr>
<tr>
<td>360 days</td>
<td>1</td>
<td>1.5%</td>
</tr>
<tr>
<td>365 days</td>
<td>28</td>
<td>41.2%</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

Table 11. A cycle of deferment of payments of liabilities – statistics on the denominator recognition in the analyzed reports on the financial statement audit

<table>
<thead>
<tr>
<th>Specification</th>
<th>Number of reports</th>
<th>Percentage share of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>No definitions</td>
<td>27</td>
<td>39.7%</td>
</tr>
<tr>
<td>Costs of business activity</td>
<td>1</td>
<td>1.5%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>23</td>
<td>33.8%</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>Cost of products, services and goods sold</td>
<td>2</td>
<td>2.9%</td>
</tr>
<tr>
<td>Manufacturing cost of products sold + value of goods and materials sold</td>
<td>5</td>
<td>7.4%</td>
</tr>
<tr>
<td>Other solutions:</td>
<td>8</td>
<td>11.8%</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: the authors’ own elaboration

3 For example:
- operating expenses minus change in balance of products minus manufacturing cost of goods and services for internal needs,
- cost of products, goods and materials sold plus cost of sales plus general and administrative costs,
- operating expenses minus depreciation minus labor costs minus taxes and fees plus tax on commodities and services charged at purchasing.
3. CONCLUSIONS

The presented analysis of the structure of the indicators calculated by the auditors and presented in the reports on the financial statement audit of the listed companies indicates clearly vital problems of comparability of the data obtained in this process, if we want to compare and evaluate financial standing of the selected companies in the research group. On basis of the analysis of over 70 reports it results that none of the used indicators is recognized in each of the reports, thus there is no set of indicators which can form a standard while evaluating the listed companies from the construction trade. When we want to compare financial standings of these companies, such a set of uniformly defined indicators should be adopted for each trade.

A second layer of the problems connected with lack of comparability of the analyzed indicators is technical matters which can include such issues like that different auditors can recognize initial or end values from those both values in the nominator or denominator, what at lack of uniform standards caused problems with comparability of the obtained financial data. The similar technical problem is an issue of recognizing a number of days in a year in calculations where we can meet either a figure of 360 or of 365 days.

However, the most serious problem concerning lack of comparability of the financial data in a form of the financial indicators calculated by the auditors is ambiguities while defining the basic items of the balance sheet, the profit and loss account which are caused by lack of uniform templates for those elements of the financial statement in a case of forms using IFRS. It is proved by different names of revenues, and also costs, different approaches to the current assets. In the paper it has been emphasized that term “revenues” occurs under such a form as: total revenues, operating revenues, revenues from sale of materials and goods, net revenues from sale of materials and goods, and for costs there are terms, among other things, such as: operating expenses, cost of goods sold, cost of products and goods sold. This diversity of terms contains different figure ranges, and it entails that the indicators containing these different items cannot be compared. According to the Authors a reason for this variety which in consequence leads to lack of comparability, is far-reaching freedom to form a structure of the financial statements made pursuant to IFRS.

Leaving freedom to form the structure of the financial statements by the particular listed companies, the Authors postulate to implement a set of standard indicators which will be calculated and presented obligatory by the auditors auditing the annual financial statements of the listed companies. Nowadays, work of the auditors in this scope deems to be too useful for stakeholders.

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ERP SYSTEMS IN SERVICES: 
PRELIMINARY STUDY FROM THE CZECH REPUBLIC

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Abstract
Hotel management systems are designed to facilitate working routines and improve the fluency and efficiency of operations in hotels and other accommodation providers. Hotel organizational structures are known for their complexity, therefore communication and information flow between separate functional departments, i.e. front office, accounting, convention, F&B and sales, is a key factor to proper and continual account management, resource planning and mainly guest satisfaction. This complexity is projected into current set-up of information system. Frequently, hotels are using several specialized systems for different departments. This fact impacts on reliability, accuracy and availability of information inside the hotel. Finding the best fit for the use of various technologies in this highly competitive industry is critical also because interpreting customer needs and forecasting market trends is so important. The aim of this article is to uncover informational linkages between the relatively independent departments and information systems and to ascertain the perception of HMS users within Czech hotels. To answer the proposed questions the paper uses questionnaire research methodology-combined with interviews on sites. To complement the picture of the use of ERP systems in the industry the perceived quality of internal information system and easiness to use information from external environment having impact on the service is also assessed

Keywords: information systems, hospitality, Property Management Systems, access to information

JEL Classification: L2, L8

1. INTRODUCTION

Information systems dominate functional operations management in modern companies in both production and services sectors. Enterprise resource planning systems (ERP systems) are now used for executing operations, planning, decision-making and strategy building contrasting the more traditional role of reporting and recording for analysis of historical data.

This study focuses on information systems used in hospitality services in the Czech Republic. The study recognizes that Czech hospitality firms typically use modular information systems, in turn can compromise interaction amongst various hospitality functions. Hotel management systems are designed to facilitate routines in front office and improve integration of efficiency in hotels and other accommodation providers. Furthermore, to improve the efficiency of services, information needs to be shared amongst several departments. Hotel organizational structures are known for their complexity, therefore communication and information flow amongst departments (e.g. front office, accounting, convention, F&B and sales) is a key factor ineffective and continuous account management, resource planning and, more significantly, guest satisfaction. This complexity is projected into current set-up of information systems. Frequently, hotels use several specialized systems for different departments or functions. This fact impacts reliability, accuracy and availability of information inside the organization. Finding the best fit for the use of various technologies in this
highly competitive industry is critical also because interpreting customer needs and forecasting market trends is vital. Furthermore, information systems need to be linked externally while being able to incorporate this data in decision making process.

The aim of this article is to uncover information linkages between the relatively independent departments and to ascertain the perception of HMS users within Czech hotels. To answer proposed questions. A questionnaire research methodology is used, combined with on-site interviews. The study is limited to Czech Republic.

The problem of limited information available within each component becomes can burden overall operational effectiveness. This barrier is typically bridged by experienced human resources, who are indispensable no matter how sophisticated the information system is. This is a typical feature of all service sectors. Choosing and building inappropriate ERP system reflects internal culture. Not all companies are ready to use an off-the-shelf ERP system, especially in special services where tasks are not typically standardized (Morton & Hu, 2008).

Our research paper aims to reveal what systems and/or combinations thereof are used in Czech hotels and whether HMS systems are used differently in hotel chains and in individual hotels depending on size, category, hotel type and orientation. Impact on perceived quality of services, guest satisfaction and employee retention is also interesting facet of ERP use.

2. CHARACTERISTICS OF ERP SYSTEMS AND HOTEL MANAGEMENT SYSTEMS

The biggest players in the ERP systems today are SAP, Oracle, Infor and Microsoft. According to an Independent Study – Clash of the Titans (2016) – SAP had the largest market share, with 23% in the period from June 2014 to October 2015, followed by Oracle and Infor with 16% each, and Microsoft Dynamics with 9%. The study is organized in several parts – evaluation of ERP systems actual implementation, functionality compared to returns over the two-year period and main benefits. All above mentioned systems helped organizations primarily to improve the availability of information, increase internal communications and enhance integration of business activity.

Because implementation of ERP systems is increasingly complex, subsequent use of functionality of ERP becomes a key organizational element. Amongst the systems, Infor has the most predictable implementation time. It is also the most successful in the use of all functions by its users. Given the specific needs of users, common customization of ERP systems is especially frequent among Microsoft customers. Behind the need for customization, however, is possibly poor initial evaluation of the needs of the company. In the ERP implementation cost Oracle is the most expensive and Microsoft is the least expensive. The best return over first two years of use following implementation were Oracle and SAP.

The general logic of management information system is depicted below:
Currently, there is a wide variety of HMS systems on the market. Selection of the optimal system is essential for proper and effective hotel functionality. The main function of a hotel information system is primarily to support basic operating procedures of hotels, which include reception (front office), restaurant (F & B department) or conference department (convention department). Such system must be able to handle bookings and guest check-in and check-out, rooms management, management of hotel bills, billing (billing) and report generation. All this must be implemented in a simple and user-friendly manner that encourages focus primarily on the customer. In a world full of information technology, these features indispensable, but should be supplemented by additional components allowing hotel management to optimize use of all available resources.

With the development of on-line technologies, a significant portion of guests across all segments use the services of GDS (Global Distribution System) such as Amadeus, Worldspan, Galileo, and OTA (Online Travel Agents) such as Booking.com, Expedia, or HRS. So if hotels want to take this opportunity to offer their services to the global market, linking these systems with hotel information systems is essential. To operate these systems, links to hotel information systems often are through CRS (Central Reservation System), which according to its settings, not only receives bookings from the GDS and OTA, but also can be used to manage prices and inventory (rate and inventory management) through online resources.

An important part of HMS is also RMS (Revenue Management System), which is primarily used for creating, implementing and monitoring strategies at the right price. The integration of the module into the information system of the hotel and allows hoteliers to easily monitor important KPI (key performance indicators) such as ADR (Average Daily Rate), RevPAT (Revenue Per Available Room) or availability. At the same time, it provides multi-variate analysis of hotel performance leading to improved planning. For example, RMS often has tools to enable market analysis and monitor competition (Rate Shopping Tools).

The above-mentioned parts are available with HMS with the largest players in the ERP market such as Oracle or Infor. These have additional modules to manage HR, CRM, and Housekeeping with possible extension of mobile technology to enable easier and more efficient customer contact and communication.
3. PREVIOUS LITERATURE

Many authors have investigated the use of information systems in the hospitality industry. Thus the studies have covered different aspects. Our review concentrates on studies published after 2000 to reflect the newest trends.

Siguaw, Enz and Namasiavayam (2000) researched the utilization of information technology (IT) in US hotels. The study showed that the IT technology is most used in convention hotels, conference centers and casinos, and less used in other types, such as motels and bed-and-breakfasts. Chain-affiliated properties typically adopted more technologies than independent hotels.

Buhalis & Licata (2002) discuss the roles of traditional and new web based intermediaries in hotel industry. The authors suggest that nowadays new eMediaries include a wide range of organisations, including suppliers (e.g. airlines, hotels etc.), selling directly on the Internet by allowing users to access their reservation systems directly and web-based travel agents. Thus information is dissipated through new channels, with which traditional intermediaries need to compete.

Morton and Hu (2008) suggest, that with the process of implementation of an ERP system, an organization’s top management is often tempted to adopt the ERP without understanding consequences of a potential misfit between the system and the organization. It is suggested that ERP systems are a good fit with some organization types, but a poor fit with others. Organizations whose structures are a poor fit with ERP systems are likely to face organizational resistance to the systems and thus increase the chances of unsuccessful implementation. This is of course applicable not only to hospitality industry.

Kokaz-Pucciani and Murphy (2011) investigated the use of data for management of hotels and concluded that in spite of a wealth of collected data, the information is often not used for management and reporting. The researchers concluded the staff is not provided with necessary training.

Azevedo et al. (2012) have analysed the role of ERP systems in the manager’s routines. The authors found that ERP Systems cannot automate all activities in the information processes of all departments in an organization through integration of internal systems. The authors have shown the necessity to implement additional specific applications in special situations within the hospitality industry.

Kaya and Azaltun (2012) analysed the efficiency of supply chain activities in five-star hotels in Istanbul. The authors found that purchasing, inventory management, warehousing, customer relationship and service production processes in these enterprises are mainly executed using conventional methods. Internet is used to replace fax as a means of communication within the supply chain. The role of information systems is determined in the context of corporate information systems.

Rus and Negrușa (2014) explored booking engines used by hotels in Romania. They start with the premise that hotel websites, which were previously used for promoting hotels, are also used for booking. In this way customers can book rooms online directly without using other intermediaries. Authors investigated the perceptions of hotel website users and presented an overview of online booking engines used by hotels in Romania, highlighting their main characteristics and features.

Azevedo et al. (2014) discuss strategies towards integration projects in Portugal. The authors claim that globalisation and competitiveness are factors forcing organizations to adopt the most recent technology and to use technical systems become more elaborate and complex. In the hotel industry, software needs to integrate data and functionalities within several systems. This is a challenge which should enhance flexibility and adaptability of both systems and their end users.

Mohamed (2015) explores the use and limitations of ERP systems and examines the major Critical Success Factors in the hospitality industry sector. The study explores five-star hotels in Egypt. The author found that there is no ERP to cover all the hotel processes. Major critical factors were finding appropriate ERP consultants, avoidance of software changes, confirmation of finalized solutions, extensive employee training/education and involvement of project team members.
Pérez-Aróstegui et al. (2015) investigated the relationship between information technology and quality management. Authors claim that IT is a useful tool only when it is combined with other corporate resources and practices assuring that IT and organizational practices are complementary. The paper provides proof of a significant positive relationship between these two items using a sample of 230 Spanish firms.

Pranic, Garbin Pranicic and Arneric (2014) investigated 197 hotel websites in Croatia to find out whether they exploit the potentials of the internet as a marketing tool. Authors concluded the hotels are using internet websites as marketing tool they are not effectively using websites from the user-friendliness, marketing effectiveness, and F&B perspectives.

Langvinienė & Daunoravičiūtė (2015) examined factors influencing success of business models used in the hospitality industry. Authors claim that organizations are more and more dependent on their customers, especially in the service industry. The most important role in the hospitality industry is played by customers. Business success depends on their needs, and the success of the business depends on value creation through innovations implemented as part of service delivery acting within the hospitality model, which in turn is grounded in customer value creation.

Further literature analyses and evaluates ERP systems in hotels also raising concerns about the effects of job satisfaction and organizational commitment in the hotel industry (e.g. Uludağ, Khan, and Güden, 2011) and Corporate Social Responsibility in hotels (Usunier, Furrer & Furrer-Perrinjaquet, 2011 and Wells et al., 2016).

4. METHODOLOGY AND SAMPLE

This paper based on an online questionnaire method to investigate the issue of use of information technology in Czech hotels. The questionnaire is composed of three major parts – identification of respondent, nature of information system and quality of information systems. The conclusion is basically general information about the use of an in-house information system. This questionnaire was pre-tested with users in the industry and based on consultations with academics.

The questionnaire was prepared, using three primary research tools: First, an unstructured interview-discussion, to identify the major areas of research and formulate the basic research questions. Second, further discussion was undertaken with a small number of experts to prepare the final questionnaire and an interview structure. Finally, qualitative interviews with a small number of experts (mainly academics and consultants) helped to accrue more in-depth information and to clarify inflection points. The experts were found in academia and in the hotel industry itself through active participation in international tourism and IT conferences. Unstructured discussion enabled the researchers to interact with participants and to identify critical issues.

Based on this activity, the questionnaire was drafted and elaborated upon, including a number of variables to record expert opinions and views. The questionnaire consists of 15 blocks of questions based on previous literature and background study, secondary research and pilot interviews with a select number of experts.

A sample of companies was drawn from a database prepared by Bisnode, assembling marketing information on hotels in the Czech Republic and information from their international affiliate, Dun and Bradstreet. The initial sample contained 434 firms providing hotel or accommodation services. The selected sample contained were medium or big companies according to the number of employees. According to our results, more sophisticated information systems are not used by small companies because the cost would outweigh the benefits.

The part of the questionnaire containing qualitative questions was organized into six parts:

(1) Identification part: number of employees, number of rooms, hotel type, locality of hotel and average price of double room.

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(2) Characteristic of current information system: main provider and complementary provider, areas covered by IS.
(3) Usefulness of IS for management routines and hotel strategy based on Kaplan & Norton’s Scorecard (see below).
(4) Qualitative assessment by end users.
(5) Intramural links within the enterprise – How effective is information sharing throughout the hotel?
(6) Final assessment of the system as a whole and suggestion of possible changes – open feedback question from respondents.

The goal of this pilot research involving up to ten respondents was to identify duplication and possible overlaps in questions and/or batteries of questions. On the other hand, we wanted to identify possible missing parts and purify the logic of our research. Generally, questionnaires in service sectors concentrate less on production and related costs, accounting and reporting and are more concerned with quality of service, related client satisfaction and/or possible customer retention and loyalty. That is where value creation lies in services. The human factor plays a decisive role. Services are much more labour intensive than traditional production. Another key point in services is quality and quantity of customer relations, turnaround time (e.g. waiting time in reception, quality of restaurant services, etc.)

5. PRELIMINARY RESULTS

During the preliminary pilot, researchers have carried out interviews structured in the same way as the on the questionnaire.

Number of interviewees – 5 (3 in Jizerské Hory and 2 in Prague).

In Jizerské Hory we interviewed 2 B&B’s and 1 small hotel.
Number of employees: < 12
Number of rooms: < 50
Hotel type: B&B
Location Jizerské Hory
Average price of double room: < 500 CZK

The greatest deciding factor in choice of an information system was cost. Furthermore these hotels were far too small to use sophisticated IS effectively (Morton & Hu, 2008). Most respondents used generally available online services to enable hotel management together with their own communication tools and web-pages.

Overall, in the hotel resort “Jizerské Hory” the accent remains on quality of services at the hotel and in the restaurant. The owners do not monitor costs but monitor profit. The goal of hotel is to maintain an optimal level of guest satisfaction. Communication with guests is considered to be paramount. Feedback on hotel web-pages is crucial. These hotels do not keep an official IS, but use web based services. Here, research results are influenced by small hotels in mountains.

The second group of respondents in this pilot study were representatives of large hotels in larger centres. In these centres, hotels are predominantly conference hotels and or business hotels. In our research we interviewed two representatives of hotels with 200–300 employees, and double rooms at CZK 2,000–4,000. Both hotels were parts of hotel chains.

Main providers of ERP services were Opera (Oracle), and Amadeus (Infor). These hotels use whole variety of products to manage different lines of business – reception, F&B, business, marketing, strategy etc. Therefore, there is an issue of links and information sharing. Web-based services are used in booking systems and communications with reception. Hotel systems are generally
perceived as relatively easy to use systems in order to enable hotel staff to concentrate on guests’ needs.

6. DISCUSSION

As we have seen, literature deals with different aspects of ERP from particular perspectives. The authors discuss the link to specific data requirements for routine management on one hand and for formulation of strategy and providing information for further development on the other. Extant research confirms that ERP systems are a vital part of the intra-firm management process and significantly influence efficiency and competitiveness.

ERP implementation is a two-way process. On one hand companies are trying to optimize processes to enhance performance while on the other hand, companies implement new features embedded in software package to improve standards. Practically, implementation of ERP is demanding mainly on qualified workforce but is also challenging to management, who must assure those affected that the new ERP philosophy is compatible with corporate culture.

Another important consideration is that results of ERP implementation will be visible only in the long run, after the company and its management style becomes more compatible with modern ERP technology.

„The duality view of technology is especially silent in the context of ERP implementation. During the ERP implementation process, organizations not only can and often do customize the modules to fit their business processes, but also reconfigure and redesign some business processes to accommodate and take advantage of the best practices embedded in the software.“ (Morton & Hu, 2008, p. 399–400)

Our pilot research has confirmed many small companies do not use ERP systems in management of information because the modular concept of management is not suited to their style of work and software is far too specialized. Small organizations are able to respond to demands of the fast changing environment and meet the standards of their profession often with the lowest costs. Big companies use systems HMS Opera (Oracle), and Amadeus (Infor).

In this research we have used the method of Balanced scorecard to evaluate the complex performance of the subject. The concept of Balanced Score Card was developed by Kaplan and Norton (1996), and since that time it was used in many studies exploring profitability and integrity of companies). Services are specific unlike production where the processes are much more standardized.

The goal of our study was to identify the current situation in the usage of management information system in the service companies – example of hotel segment to execute the internal management processes and linkage to outside systems. In practice is the effective information system conditioned by adequate and flexible computer information systems.

7. CONCLUSION AND LIMITATIONS

Data management is critical for both customer service and internal management. For the hospitality industry the relation with guests is crucial. Therefore, effective work with client information determines positive customer response and business sustainability.

Reservations, checking-in, and checking-out are the basic requirements for hotel needs sustain guests booking at the hotel. Information systems should support these activities and be able to offer more advanced features to use and share customer information. Well linked information systems and their interaction with Web applications enable efficient operational contact and communication with clients, which is critical for the hotel service.
“The PMS is often referred to as the single-most important IT application for hotels”...... followed by 'point of sale' (POS) and ‘central reservation systems’ (CRS.” Kokaz-Pucianni and Murphy (2011, p. 102)

Bardi et al. (2003) defines hotel PMS as a network of various hardware and software applications used to manage a hotel i.e. sales & marketing, night audit, accounting, human resources management, electronic mail, security, reservations, front desk, call accounting, housekeeping, maintenance and food & beverage. It is recommended that managers promote the availability and awareness of data and invest in tools and processes that promote cross functional optimisation of data and link business objectives to data resources.

In each service sector, ERP systems are structured according to firm specifics and organized utilizing modern concepts of information management for management accounting. ERP systems are able to work with analytical data for service and operations but are also able to evaluate and assess qualitative indicators based on hotel management needs capturing the broad concept of corporate social responsibility (CSR) and evaluate customer satisfaction. An ERP system is typically modular and its various components focus on routines within the business. Individual modules can also focus on external factors and resources – e.g. booking system and reservations

ERP systems have the potential to improve corporate performance and enhance communication between the divisions and workplaces, as well as assisting in formulation of long-term corporate strategy. Operational continuity between individual modules is in practice often facilitated by MS Excel used by qualified staff, and is indispensable for the more advanced use of ERP systems which is essential these days. Factors which result in the lack of interest in using management accounting or ERP systems in Czech SMEs can be a question for subsequent research. Also, dependence of efficiency on ERP usage in the Czech business environment would be a significant contribution to our understanding of service management theory.

ERP systems address not only cost and management of in-house calculations (or allocations of overhead costs based on traditional approaches or on activity based costing), but it can also utilize the Balanced Scorecard system and focus on practical measurement and interpretation of more advanced features that are sometimes difficult to grasp quantitatively (such as e.g. future development and motivation of staff or management incentive schemes). It can also help satisfy the requirements of different groups of stakeholders by providing performance measurement of guest activity and internal processes.

This pilot study indicates that for further research the questionnaire needs to be modified to better assess diverse systems and external resources and applications which impact overall productivity and sustainability of the business.

As important results, we can consider the fact that many of the subjects do not use information systems at all. We assume that is mainly due to perceived costs of the system but it may be also due to lack of preparedness of small hotel management to use such systems.

This issue can be an area for future research. Our preliminary pilot study also revealed that there is also a need to work with the database, because, as the research revealed, there are many subjects that do not provide hotel services.

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REFERENCES


ASSESSMENT OF AN ACCOUNTANT’S PROFESSIONAL JUDGEMENT INFLUENCE IN DETERMINING THE PRESENCE OF THE CONTROL OVER AN INVESTEE

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Abstract
The paper presents the results of the authors’ research. The research focuses on the problem of the assessment of the professional judgement impact on the scope of consolidation in preparing consolidated financial statements in accordance with IFRS by Russian companies. The scope of consolidation is determined by definition of the concept of “control” (“de facto” control) according to IFRS 10 “Consolidated Financial Statements”. In turn, the interpretation of “control” is determined by the judgement of the accountant. Consolidated financial statements under IFRS of contemporary Russian companies serve the research object. The result of the research shows that a considerable proportion of Russian companies (40.00%) apply judgement in determining whether the investor controls investee. In fact, it is stated that the scope of consolidation is based on opinion of accountant. Out of 130 sampled companies, 36.92% of large and medium-sized Russian companies consolidated the investees due to “de facto” control and in the absence of more than half of the voting shares. 3.08% of the sampled corporations did not consolidate entities due to the lack of “de facto” control, although they owned the prevailing share participation in such investees. The paper also reveals factors having entitled the companies to include such investees in the scope of consolidation. The paper also presents the results of the analysis of the correlation between the size of the company and type of its business and the application of the judgement whether “de facto” control exists.

Keywords: accounting in Russia, consolidated financial statements, control, IFRS implementation in Russia, professional judgement

1. INTRODUCTION

In the course of the historical development of financial accounting practice and theory in different countries, new ideas come into being. They complement the accounting practices in other countries, and this process is still ongoing. Owing to the experience exchange between countries, some principles (regulatory rules in some countries) have been created in Accounting. These principles have contributed to the improvement in the scope of information of the financial reporting, which is undoubtedly beneficial for its users. The emergence of International Financial Reporting Standards brought business cooperation (and people doing business) to a new level of relationship— to the inter-country level. Presentation of financial statements based on the unified principles means increasing comparability of companies’ financial data which are analysed by users, including the investors. Professor Sokolov wrote that “IFRSs are a great memento to the theoretical thought of accountants of 20th century”. He also compared the importance of the appearance of IFRSs with Luca Pacioli’s book “Treatise on the accounts and accounting entries” published in the 15th century (Sokolov, 2005, p. 72).

The emergence of IFRSs was a beneficial step not only for “inter-country communication language”, but it also influenced (at the national level) national accounting systems development trends. With regard to Russia, Sokolov (as a person who largely contributed to the development of the Russian accounting system) compared the emergence of IFRSs in Russia with
“a thunderbolt”: “Transition to IFRS is like a peculiar lightning strike in the light of which it is necessary to think for himself and in an absolutely new way completely” (Sokolov, 2005, p. 76). “A lighting strike” means a significant impact on the thinking of the Russian accountant generally, on the one who is accustomed to prepare the financial statements according to clearly regulatory rules, rather than according to principles.

Currently in Russia pursuant to the provisions of the Federal Law No. 208-FZ “On Consolidated Financial Statements” dated 27 July 2010, consolidated financial statements are prepared in accordance with IFRSs. For more details about the development of legal regulation to prepare consolidation financial statements in Russia see in Generalova, Karelskaya (2014). Application of IFRSs in Russia at the present stage can be divided into “direct” and “indirect”. Application of IFRSs in accordance with the provisions of Law 208-FZ by credit organizations, public and other socially significant companies can be defined as “direct” application, i.e. when the standards are directly applied. “Indirect” IFRSs application means a gradual convergence of national standards in accordance with IFRSs through the development of these standards based on international standards (Genaralova, Soboleva, Sokolova, 2015). With respect to methodology of preparing consolidated financial statements, the issue of implementation of the “factual” control concept in practice is still among the most difficult ones. The concept of “factual” control (control “de facto”) is the basis for determining the scope of consolidation in accordance with IFRS 10 “Consolidated Financial Statements”. The research conducted by the authors is presented in this paper and is devoted to studying of this issue by the example of Russian companies.

Determination of whether the parent company controls an investee requires an substantial judgment. Professional judgement in preparing the financial statements in Russia has some peculiarities in comparison with judgement made by accountants from countries with the Anglo-American system of accounting because historically because Russian accounting system was based on clearly defined rules, i.e. instructions for a long period of time. The notion of “professional judgement” is a relatively new term for the understanding by a Russian accountant. Thus, this fact creates a condition for a peculiar implementation of judgment in practice. In the paper published in 2010 professor Piatov and I. A. Smirnova wrote that “Unfortunately, if we start to tell about professional judgement to our colleagues, many of them start to smile. They would at best think that it is an inexperienced accountant who is a romanticist” (Piatov, Smirnova, 2010, p. 145). But at the present time, the “professional judgement” topic is one of the most popular and important ones among Russian publications and student graduate works. Indeed, due to coming of IFRSs in Russian accounting practice and to Russian accounting reform in 1990s, the development trend of national accounting began to gradually focus on implementation of judgement in practice gradually.

The interpretation of “judgement” proposed by Sokolov is the most widespread one (as it is most frequently used in publications), i.e. “Professional judgement made by an accountant is a conscientious opinion expressed on the economic situation and which is useful for describing it, as well as for taking effective management decisions”. Sokolov emphasized that one of the keyword phrases in this definition is the phrase “conscientious opinion or fair view” (Sokolov, Sokolov, 2011, p. 258–259).

Defining the scope of consolidation based on the concept of control in accordance with IFRS depends on judgement largely. And accountants from different countries can make judgement on different ways due to country and national peculiarities.

This paper presents the results of the authors’ research. This research focuses on the problem of the assessment of the professional judgement impact on the scope of consolidation in preparing consolidated financial statements in accordance with IFRSs by Russian companies.

The aim of the research is to analyze the nature of the application of professional judgement by Russian companies in determining whether the investor controls an investee; and also to analyze factors that can be considered in making determination of whether the control over subsidiaries and structured entities is substantive in the absence of “legal” control. The research is based on the study of consolidated financial statements data for 2015 of large and medium-sized companies (for more
details about study methodology see paragraph 4 of the paper). The sample consists of 130 companies (i.e. their consolidated financial statements).

The paper is structured as follows. Paragraph 2 provides a reference of the “control over the envestee” concept in accordance with IFRS. Paragraph 3 gives a brief historical summary of the main trends in the regulation of the consolidated financial statements in Russia at the turn of the 20th and 21st centuries; also the study provides information on the application of IFRS in Russia at present, i.e. “direct” and “indirect” implementation of IFRSs. Paragraph 4 offers the results of authors’ study into the Russian companies consolidated financial statements for 2015. The conclusion contains the key findings. Appendix consists of the list of companies included in the sample.

2. THE CONCEPT OF “CONTROL” IN IFRS

The unified terminology applied in the inter-country environment is one of the most important preconditions for the formation of clear and comparable financial statements of companies operating in different countries. The necessity to level terminological uncertainty is often being discussed at international scientific conferences. For instance, ICAAT 2014 (see paper Alver, Alver, 2014, p. 1–8) in Tallinn, IBIMA 2016 in Italy, “Sokolovsky readings” in Russia (see paper Kovalev, 2015, p. 605). University professors attempt to solve this problem by way of issuing specialized dictionaries and books. Such dictionaries and books help to understand the main differences between interpretation of the term traditionally used at the national level and the interpretation implied by IFRS. Examples are the dictionary by Estonian authors Toots and Alver (2008) and the book by Kovalev and Kovalev (2015).

The term “control of an investee” in IFRS was also being reviewed and clarified during the course of a lengthy period of time. It can be stressed that the development of the idea of “factual” or “de facto” control which differs from “de jure” interpretation of control, is prevailing. The “De jure” control appears in the presence of ownership of majority voting shares in the investee. Consolidation in accordance with “factual” control means the inclusion in the scope of consolidation the entities, in which the investor has the power and ability to regulate the relevant activities (according to IFRS 10, par. 7). For more details in regard to the issue of interpretation of “control” (which was raised in the 1970s in the course of the first international standards on consolidation IAS 3 “Consolidated Financial Statements” preparation) see the by Zeff and Cammfferman (2007, par. 5.5.2). At the present time, an accountant is guided by IFRS 10 “Consolidated Financial Statments” in preparing consolidated financial statements. When IFRS 10 was issued, the definition of “control” was clarified. The adoption of IFRS 10 was the next step towards the development of the idea of “de facto” control.

Application of the concept of “de facto” control generally leads to an extension of the scope of consolidation. In other words, the investees who have not previously been classified as subsidiaries (under the dominance of “de jure” control treatment), in light of the “factual or de facto” control may be included into the group and consolidated.

The current treatment of control requires the accountant to make judgment on practice. Application characteristics of the professional judgment in determining the scope of consolidation by contemporary Russian companies are presented in the paragraph 4 of the paper.

3. DIRECT AND INDIRECT IFRS APPLICATION IN RUSSIA AT THE PRESENT STAGE

The mandatory preparation of consolidated financial statements in accordance with IFRS for several categories Russian companies appeared with the adoption of of the Federal Law No.208-FZ “On Consolidated Financial Statements” dated 27 July 2010. According to Federal Law No. 208, since 2012 socially significant companies (for example, public companies, banks, insurance companies) have had to prepare consolidated financial statements in accordance with IFRS.
At the present stage, application IFRS in Russia can be divided into “direct” and “indirect” implementation. Application IFRS by credit, public and other socially significant organizations can be named as “direct” application IFRS in Russia. “Indirect” application means a gradual convergence of Russia national GAAP with IFRS. (Genaralova, Soboleva, Sokolova, 2015).

The next paragraph is dedicated to research results obtained during the study of consolidated financial statements for 2015 of Russian companies. It outlines the key points of the practical aspects in determining the scope of consolidation by Russian companies based on the concept of the control contained in IFRS. Such determination is defined by judgement.

4. RESEARCH RESULTS

Research methodology
The rating of 600 largest Russian companies in 2015 (RAEX 600) was used for sample selection (http://www.raexpert.ru/rankingtable/top_companies/2015/main/). Out of 600 largest Russian companies only 125 corporations had prepared the consolidated financial statements in accordance with IFRS. These 125 Russian Groups were included into the sample. Besides, 5 companies were additionally studied. These companies were not included into rating RAEX 600 but they do consolidated financial statements according to IFRS. These companies are PJSC “Rollman”, PJSC “Norvik Bank” (“Vyatka Bank”), PJSC “Tattelecom”, PJSC “Lenenergo” and Moscow Exchange MICEX-RTS. The presence of these companies securities traded on the stock exchange was the criterion to include these additional companies into the study.

All in all, the sample includes 130 observations (i.e. companies and their consolidated financial statements). The consolidated financial statements in accordance with IFRS of the sampled companies have been taken from the official sites or official centers of corporate disclosure (such as Interfax: https://www.e-disclosure.ru/#). Predominantly, consolidated financial statements of the companies have been studied for the year 2015. However, five companies (included into the RAEX 600) had not published the consolidated financial statements for 2015 by the time of the research. Thus, out of 130 statements studied, 125 consolidated financial statements had been prepared for 2015, three – for 2014, one – for 2013 and one – for 2011. This present allowance (to leave these five financial statements for the years different from 2015 in the sample) was not expected to not have a distorting effect on the results as long as their amount is insignificant in comparison with the sample size.

The sampled companies also have been studied with due regard to the industries and companies volume of business. Grouping has been based on nine industrial sectors (the list is presented in Table 3). The group of “industrial production” has combined companies of the following sectors: timber industry, ferrous and non-ferrous metals industries, coalmining, uranium industry and production of precious metals. Banks and insurance companies have been included in the “financial sector”.

Research results

4.1 Professional judgment in determining the existence of the investor control of the investee in Russian companies

IAS 1 “Presentation of Financial Statements” requires disclosure of judgements that the company management has made in the process of applying the entity’s accounting policies and estimations. Such information should be disclosed along with significant accounting policies or other reference notes (IAS 1, par. 122 and 125). These sections of financial statements have been analyzed to determine the proportion of companies that disclose information about the assumptions regarding whether the investor controls the investee. Out of sampled companies only 17.69% (23 companies) pointed out that judgement in regard to determining the scope of consolidation has a significant influence in preparing consolidated financial statements.
However, in analyzing such section of statements as “Principal Subsidiaries” it has been found out that 40.00% of companies included financial results of the subsidiaries, which had been consolidated due to presence of “factual or de facto” control (i.e. in the absence of prevailing voting share in them) or which had not been consolidated due to the lack of “de facto” control (but with presence of prevailing voting share in them). This phenomenon can lead to a two-base conclusion. The rest of the companies (i.e. 22.31% in addition to 17.69% out of 40.00% of companies) do not consider that the judgement whether investor controls the investee is a significant issue, or the size of the subsidiaries consolidated due to “de facto” control is immaterial within the preparation of consolidated financial statements.

It was also interesting to analyze which companies most often use judgement in regard to determination of the scope of consolidation. Figure 1 presents the proportion of sampled companies, which pointed out the issue “whether investor controls an investee” as part of the “Critical judgements and estimates in applying accounting policies”.

![Figure 1](image)

**Figure 1.** The proportion of sampled companies based in different industry which reported the issue “whether investor controls an investee” in “Critical judgements and estimates in applying accounting policies” (according to Russian CFSs for 2015)

Companies belonging to financial and industrial production sectors to a greater extent believe that the scope of consolidation is a key judgement, as compared to companies in other branches of industry (see Figure 1). It is may be concluded, the companies of financial and industrial production sectors consolidate the companies due to “de facto” control to a greater extent in practice than companies of other sectors, too. However, the conclusion is not obvious and rushed. Figure 2 shows the results of the grops’ structure study. One can clearly see that companies of “telecommunication and communication” more often consolidate structures with the ownership of less than half of the voting shares. Financial entities and manufacturing enterprises rank third and fourth in frequency and the amount of consolidated structures due to “de facto” control, respectively.
So, out of the sampled Russian companies 17.69% of companies have reported information about the key assumptions and judgements taken in determining whether investor controls an investee. Basically, these are companies of financial and industrial production sectors (Figure 1). In fact, 40.00% of the sampled companies have included (or have not included) investees, in which the prevailing ownership share was absent (was not absent) (36.29 and 3.08% respectively) in the scope of consolidation. Companies of “telecommunication and communication”, as well as “mechanical engineering” are more likely to include a larger number of subsidiaries in the group than the biggest Russian companies of “oil and gas industry” and of “industrial production” sectors (Figure 2). As for their market capitalization, companies belonging to “telecommunication and communication” and “mechanical engineering” occupy lower positions than the groups of “oil and gas industry” and “industrial production” sectors, which tend to judge in non-consolidation rather than in consolidation.

4.2 Application practices of the concept of “de facto” control by Russian companies: causes of consolidation and non-consolidation

Out of 130 sampled Groups, 36.92% (48 companies) companies pointed out, that they had had the “de facto” control over the investees with ownership in them of less than half of the voting shares. 3.08% of the sampled companies had not consolidated undertakings with ownership in them of more than half voting shares (joint ventures are not taken into account in calculation).

Figure 4 presents the studied research reasons for determining whether investor controls an investee due to “de facto” control in sampled companies. The list of reasons is ranked by the frequency of their application in practice. The cause “Structured consolidated entities” was allocated in a separate group of reasons.

40.38% of sampled companies consolidated the structured entities. And many of them reported the fact in the “Critical judgements and estimates in applying accounting policies”. Likewise, a significant number of companies (13.46%) believe that they have control over the investee due to the fact that the other shareholdings are widely dispersed. The next important factor of the presence of the control is the agreement with the other investors. 4.69% of sampled parent companies enter into agreements with the other investors so that the control belongs to the parent company. There are also other factors which gave Russian companies control over the investee (see Figure 3).
Because financial companies had some notable and specific trends in terms of including of certain type of subsidiaries in the scope of consolidation, they were excluded. The comparison of the results obtained for the whole sampled total and for sampled total without financial companies is presented in Table 1.

Table 1. The proportion of sampled companies with and without financial companies, which applied factors in considering whether investor controls investee

<table>
<thead>
<tr>
<th>REASON FOR CONSOLIDATION (factors to determine whether the investor controls the investee, in the absence of “de jure” control)</th>
<th>The proportion out of the total sampled companies (including financial companies), %</th>
<th>The proportion of sampled companies without financial companies, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Consolidated structured entity (specially founded for the purposes of the Group)</td>
<td>40.38</td>
<td>6.45</td>
</tr>
<tr>
<td>2) Indirect Subsidiary (i.e. the parent entity has an indirect ownership interest in the equity of the subsidiary of less than 50%)</td>
<td>15.38</td>
<td>25.81</td>
</tr>
</tbody>
</table>
| 3) Wide dispersion of voting rights holdings among the other holders. The majority of votes in the Board of Directors  
  ● the size of the investors’ holding of voting rights relative to the size and dispersion of holdings of the other vote holders gives the investor an unilateral ability to direct the relevant activities and control an investee.  
  ● the investor has power over the investee arising from the majority of votes at the Shareholders’ meetings. | 13.46 | 22.58 |
<table>
<thead>
<tr>
<th>REASON FOR CONSOLIDATION (factors to determine whether the investor controls the investee, in the absence of “de jure” control)</th>
<th>The proportion out of the total sampled companies (including financial companies), %</th>
<th>The proportion of sampled companies without financial companies, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>4) A contractual arrangement between the investors (the investor has sufficient rights arising from the contractual arrangement with the other vote holders to give it powers over the investee)</td>
<td>7.69</td>
<td>9.68</td>
</tr>
<tr>
<td>5) Overall, the phrase “de facto” control (the investor controls the investee due to the control criterion)</td>
<td>5.77</td>
<td>9.68</td>
</tr>
<tr>
<td>6) Potential voting rights (the preliminary purchase agreements of shares and other potential voting rights give investor current ability to direct the relevant activities)</td>
<td>5.77</td>
<td>9.68</td>
</tr>
<tr>
<td>7) Call option to purchase 100% voting share</td>
<td>3.85</td>
<td>3.23</td>
</tr>
<tr>
<td>8) The ability to appoint investee’s members of Board of Directors</td>
<td>3.85</td>
<td>6.45</td>
</tr>
<tr>
<td>9) Investee’s voting shares owned by Group’s shareholders (ultimate beneficiaries)</td>
<td>1.92</td>
<td>3.23</td>
</tr>
<tr>
<td>10) The presence of considerably debt guarantees</td>
<td>1.92</td>
<td>3.23</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Therefore, the majority of companies which consolidate the investees with the absence of ownership of the majority voting rights, use structured entities in their activities (40.38%) (Table 1). Such entities are specially founded for the purposes of the Group and are usually are source of external financing. The comparison the second and the third columns of Table 1 demonstrates that consolidated structured entities are at large used by financial companies, i.e. by banks (40.38% as compared to 6.45% with exclusion of the financial companies). Among the 40.38% companies using the consolidated structured entities there are only two companies of non-financial sectors. They are PJSC “Dixy Group” (food products trade) and OJSC “Russian Railways” (railway transportation).

As an example, it would be reasonable to provide an extract from the financial statements. In the consolidated financial statements for 2015 of OJSC “Russian Railways” it was pointed out that the following: “The Company has no voting rights in respect of RZD Capital P.L.C., a public limited company incorporated in Ireland. The principal activity of RZD Capital P.L.C. (“RZD Capital”) is the issue of debt securities for the sole purpose of providing loans to the Company. There is insufficient equity to allow RZD Capital to finance its activities without the financial support from the Company. Based on these facts and circumstances, the Group assessed that the voting rights are not the dominant factor in determination of whether the Company controls RZD Capital and concluded that RZD Capital is a structured entity under IFRS 10 Consolidated Financial Statements controlled by the Company. Respectively, RZD Capital is consolidated in the Group’s consolidated financial statements.” (CFS of OJSC “Russian Railways”, 2015, p. 29).

Some companies distinguished the main criterion on which they relied in making judgement whether investor controls an investee. For instance, PJSC “VTB Bank” pointed out that the risk exposure and rewards analysis is the main criterion in judgement whether investor controls the structured entity.
Out of all analyzed companies only one indicated the quantitative impact of the consolidation of structured entities. It was PJSB “TransCapitalBank”. The consolidated financial statements for 2015 of PJSB “TransCapitalBank” contain the following information, “Non-consolidation of the special purpose entities would decrease the Group’s total consolidated assets by RR 2 442 228 thousand (2014: RR 3 269 347 thousand). The impact on the consolidated profit after tax would be an increase by RR 30 603 thousand (2014: a decrease by RR 100 390 thousand).” (CFS of PJSB “TransCapitalBank”, 2015, p. 18).

Out of the sampled companies, 15.38% of companies consolidated indirect second-tier and third-tier subsidiaries in which ownership interest in the equity was less than 50%. Out of these groups, only one consolidated the third-tier subsidiaries with indirect ownership of voting shares less than half shares, and that was PJSC “Rostelecom”.

Likewise, a significant proportion of the Russian companies (13.46% out of all sampled companies and 22.58% with the exclusion of financial companies) included their subsidiaries in the scope of consolidation due to the wide dispersion of holdings of voting rights among the other holders. This circumstance gives the investor a substantive rights to control the investee. Other factors that have given parent companies the right to control the investee are shown in Table 1.

The reasons for non-consolidation, in cases where the investor has a majority of voting shares but has no control of the investee, are shown in Table 2. The main reason for non-consolidation was immaterial impact of the investee’s financial results on the Group.

Table 2. The reasons for not including the investees in which the investor has the voting shares of more than 50%, in the scope of consolidation, according to Russian companies reporting, 2015

<table>
<thead>
<tr>
<th>REASONS FOR NON-CONSOLIDATION</th>
<th>The number of companies</th>
<th>The list of companies (their rating number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) The company was de-privatized and handed back to Ukraine (loss of control due to the tense geopolitical situation)</td>
<td>1</td>
<td>Plc “RUSAL” (21)</td>
</tr>
<tr>
<td>2) The lack of sole control on the basis of an analysis of the contractual agreements with other investors</td>
<td>1 (+1)</td>
<td>PJSC “NLMK” (20), Plc “EVRAZ” (15)</td>
</tr>
<tr>
<td>3) The unfavorable economic environment in the country, the bankruptcy procedure (in South Africa). (the management’s intention to wind up the entity at a significant discount)</td>
<td>1</td>
<td>Plc “EVRAZ” (15)</td>
</tr>
<tr>
<td>4) Immaterial impact of investee’s financial results on the Group</td>
<td>3</td>
<td>JSC “Gazprombank” (33), PJSC “NationalBankTRUST” (246), PJSC “The Ural Bank for Reconstruction and Development” (317)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows 6 companies (seven cases – column 2; four reasons – column 1) that did not consolidate the investees in the presence of “de jure” control. There are two out of the four reasons due to which investor has lost control as a result of the unfavorable/tense geo-political situation.

Most of the companies did not consolidate due to the immaterial impact of the investee’s financial results on the Group. For instance, JSC “Gazprombank” Group allocated a separate subsection “Unconsolidated subsidiaries accounted for at cost” in the consolidated financial
statements for 2015 and commented the following: “Unconsolidated subsidiaries and associates have neither been consolidated with the results of the Group nor accounted for under the equity method as the effect of consolidation or equity accounting would neither materially alter the financial position as at 31 December 2015 and 2014 nor the results of its operations or cash flows for the years ended 31 December 2015 and 2014.” (CFSofJSC “Gazprombank”, 2015, p. 60).

4.3 The analysis of trends in consolidation on the basis of the “de facto” control by industrial sectors

Table 3 presents the summary information with regard to the issues under consideration (“judgement and determination whether investor control an investee”) by branch of industry, in the case of Russian companies.

Table 3. The summary information about consolidation in accordance with the concept of “de facto” control by Russian Groups within the industrial sectors, CFSs for 2015

<table>
<thead>
<tr>
<th>Branch of industry / The main activity</th>
<th>The proportion of companies within the industrial sector which consolidated entities with the ownership of voting rights in them less than 50% of shares, %</th>
<th>The proportion of companies within the industrial sector which pointed out determining “whether investor controls the investee” in “Critical judgements and estimates in applying accounting policies”, %</th>
<th>The average number of consolidated subsidiaries within the industrial sector due to the presence “de facto” control, but where the voting share participation is less than 50% of investor, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Telecommunication and communication</td>
<td>60.00</td>
<td>20.00</td>
<td>5.27</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>50.00</td>
<td>0.00</td>
<td>6.98</td>
</tr>
<tr>
<td>Financial companies: banks&amp;insurance companies</td>
<td>47.50</td>
<td>25.00</td>
<td>45.28</td>
</tr>
<tr>
<td>Industrial production</td>
<td>35.00</td>
<td>25.00</td>
<td>16.09</td>
</tr>
<tr>
<td>Trading, Food production, Pharmaceutical industry, Agriculture industry</td>
<td>31.25</td>
<td>18.75</td>
<td>29.43</td>
</tr>
<tr>
<td>Electric energy industry</td>
<td>30.00</td>
<td>0.00</td>
<td>8.17</td>
</tr>
<tr>
<td>Transport</td>
<td>28.57</td>
<td>14.29</td>
<td>6.93</td>
</tr>
<tr>
<td>Construction</td>
<td>25.00</td>
<td>0.00</td>
<td>4.26</td>
</tr>
<tr>
<td>Oil and gas industry, chemical and petrochemical industry</td>
<td>11.76</td>
<td>17.65</td>
<td>15.66</td>
</tr>
<tr>
<td>The average of sample</td>
<td>35.45</td>
<td>13.41</td>
<td>15.34</td>
</tr>
</tbody>
</table>

The information contained in the second and third columns has been considered in previous paragraphs of the paper. Column 4 of Table 3 attracts attention. For each sampled company the calculation was made of the proportion of subsidiaries, which were included in the scope of
consolidation in the lack of majority voting shares of parent company. Following that, the average percentage within the industrial sector was calculated (see column 4 of Table 3).

The largest percentage of consolidated entities with no majority voting shares in them has been obtained for financial companies (the average – 45.28%). The next are trade entities (the average – 29.43%). The next are entities of Industrial production sector (the average – 16.09%) follow after. It is worth noting, with respect to financial entities, on average, the number of consolidated entities due to “de facto” control but in the absence of “de jure” control (i.e. the investor has less than half of the voting rights) approximately equals half of all the consolidated entities.

4. CONCLUSION

Consolidated financial statements is one of the requisite sources of information for investors and other capital suppliers. Consolidated financial statements are means of communication between the company and its users. At the same time, "The point about communication, the point about information, is that the receiver is genuinely informed... If effective communication is to take place the language used must be such that the signs employed evoke in others the same response as if those others were to see the object represented instead of the signs" (Alexander, Britton, Jorissen, 2007, p. 10). The topic of information role of financial statements and the requirement for its timely submission for users was discussed during the previous International Conferences (IFRS Global 2014, for instance, see paper Brauer, 2014, c. 7; Strauhar, 2014, c. 176). Therefore, the topic of the quality of information presented in the financial statements is highly important.

In preparing consolidated financial statements in accordance with IFRS an accountant makes the judgement for a number of issues. Users response reaction depends on judgement made by an accountant. In certain cases, an accountant, being aware of it, tries to “bring” data in line with the user expectations (Lakis, 2014, p. 13) and emphatically states that this is the “judgement”. However, the existence of these facts causes mistrust of users and bankruptcy of enterprisers. These facts have a negative effect on the economic state. An essential point is the scrupulosity (the fair view) of the judgement (Sokolov, Sokolov, 2011, p. 259).

Whether investor controls an investee is one of issues which requires making a judgement. To study this issue, 130 Russian consolidated financial statements in accordance with IFRS have been studied and researched.

According to the study results, the following key findings have been obtained.

1. The scope of consolidation are defined by the term of “control” contained in IFRS 10 “Consolidated Financial Statements”. The treatment of “control”, in its turn, depends on the accountant’s professonal judgement.

2. A considerable proportion (17.69%) of Russian companies refer the issue of “whether investor controls an investee” relates to the field of judgement implementation. In fact, it is stated that the scope of consolidation is based on the opinion of the accountant.

3. 36.92% of large and medium-size Russian companies (within the sample) consolidated investees in which investors do not have more than half of the voting shares. Investors control such investees due to de facto control.

Anyway, the decision on consolidation due to “de facto” control must be supported by the rights, taking into account factors that give a current ability to direct the relevant activities. Factors that determine whether Russian parent company controls an investee have been also presented in this paper.

4. Judgement influences the determination whether “de facto” control exists. This influence depends on company size. Large Russian companies, which are usually controlled by the state, are more inclined to use judgment in the area of non-consolidation (due to the immateriality) rather than consolidation. Medium-sized companies, which rapidly grow and launch IPO, apply judgement to consolidate structures in the absence more half of voting shares.
5. Judgement influences the determination whether “de facto” control exists. This influence depends on company business field. Consolidated structured entities, in which parent companies do not have a prevailing share but can predetermine its activities, are most commonly used by financial companies such as banks and insurance companies.

Further research is planned in the following areas. The author feels it important to 1) analyze the dynamics of change in the scope of consolidation based on a sample of Russian companies; compare the results with the key changes in the concept of “control” in IFRS in the course of time; 2) carry out the study on the sample of the consolidated financial statements of foreign corporations and compare considerations for using judgment in determining the scope of consolidation by Russian and foreign countries; 3) identify (including through the application of mathematical methods) possible abusive practices arising from the implementation of professional judgment in practical life in determining whether the investor controls the investee. Such manipulations may appear in order to have an influence on financial statements users.

REFERENCES

Interfax, 2016. Corporate disclosure Centre [online] Available at: <www.e-disclosure.ru/#> [Accessed 1 July 2016].


## Appendix

### List of sampled Russian companies

<table>
<thead>
<tr>
<th>Company</th>
<th>No of Ratings*</th>
<th>Company</th>
<th>No of Ratings*</th>
<th>Company</th>
<th>No of Ratings*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PJSC “Gazprom”</td>
<td>1</td>
<td>TNS energo Group</td>
<td>63</td>
<td>Bank “Saint-Petersburg” PJSC</td>
<td>223</td>
</tr>
<tr>
<td>OJSC “Rosneft Oil Company”</td>
<td>3</td>
<td>CJC “Transmashholding”</td>
<td>67</td>
<td>FESCO Transportation Group PLC</td>
<td>226</td>
</tr>
<tr>
<td>“Sberbank of Russia”</td>
<td>4</td>
<td>PJSC “Rosgosstrakh”</td>
<td>68</td>
<td>PJSC “Pharmstandard”</td>
<td>233</td>
</tr>
<tr>
<td>OJSC “Russian Railways”</td>
<td>5</td>
<td>PJSC “Nizhnekamskneftekhim” (2014)</td>
<td>70</td>
<td>PJSC “Sovcombank”</td>
<td>245</td>
</tr>
<tr>
<td>PJSC “VTB Bank”</td>
<td>7</td>
<td>PJSC “Uralkali”</td>
<td>71</td>
<td>PJSC “NationalBank TRUST”</td>
<td>246</td>
</tr>
<tr>
<td>OJSC “Surgutneftegas”</td>
<td>8</td>
<td>“Aliance Oil Company” Ltd</td>
<td>72</td>
<td>Tinkoff Bank (TCS Group Holding PLC)</td>
<td>247</td>
</tr>
<tr>
<td>OAO AK “Transneft”</td>
<td>9</td>
<td>JSC “Research and production corporation “UralVagonZavod”</td>
<td>79</td>
<td>PJSC “S.P. Korolev RSC “Energia”</td>
<td>258</td>
</tr>
<tr>
<td>OJSC “Magnit”</td>
<td>10</td>
<td>OJSC “PhosAgro”</td>
<td>84</td>
<td>“Novorossiysk commercial sea port” PJSC</td>
<td>271</td>
</tr>
<tr>
<td>PJSC “Rosseti”</td>
<td>11</td>
<td>GAZ Group</td>
<td>88</td>
<td>AK BARS Bank Group</td>
<td>278</td>
</tr>
<tr>
<td>PJSC “Inter RAO”</td>
<td>12</td>
<td>AO “UniCredit Bank”</td>
<td>100</td>
<td>Mail.Ru Group</td>
<td>304</td>
</tr>
<tr>
<td>X5 Retail Group N.V.</td>
<td>14</td>
<td>AO “Raiffeisenbank”</td>
<td>104</td>
<td>PJSC “Sviaz-Bank”</td>
<td>305</td>
</tr>
<tr>
<td>EVRAZ</td>
<td>15</td>
<td>JSC “Transaero” (2014) (the bankrupt in 2015)</td>
<td>91</td>
<td>Petropavlovsk PLC</td>
<td>290</td>
</tr>
<tr>
<td>PJSC “Tatneft”</td>
<td>17</td>
<td>JSC “Irkutskenergo”</td>
<td>96</td>
<td>PJSC “B&amp;N Bank”</td>
<td>296</td>
</tr>
<tr>
<td>PJSC “Mining and Metallurgical Company Norilsk Nickel”</td>
<td>18</td>
<td>PJSC “Rosbank”</td>
<td>99</td>
<td>“HMS Hydraulic Machines &amp; Systems Group” PLC</td>
<td>302</td>
</tr>
<tr>
<td>PJSC “Bashneft”</td>
<td>19</td>
<td>AO “UniCredit Bank”</td>
<td>100</td>
<td>Mail.Ru Group</td>
<td>304</td>
</tr>
<tr>
<td>Novolipetsk Steel</td>
<td>20</td>
<td>AO “Raiffeisenbank”</td>
<td>104</td>
<td>PJSC “Sviaz-Bank”</td>
<td>305</td>
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<tr>
<td>“Rusal” PLC</td>
<td>21</td>
<td>JSC “TENEX”</td>
<td>106</td>
<td>MDM Bank</td>
<td>316</td>
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<tr>
<td>PJSC “SIBUR”</td>
<td>22</td>
<td>PJSC “Promsvyazbank”</td>
<td>107</td>
<td>PJSC “The Ural Bank for Reconstruction and Development”</td>
<td>317</td>
</tr>
<tr>
<td>JSC “Novatek”</td>
<td>23</td>
<td>“Home Credit &amp; Finance Bank” Ltd</td>
<td>110</td>
<td>ZENIT Banking Group</td>
<td>323</td>
</tr>
<tr>
<td>“Vimpelcom” Ltd</td>
<td>24</td>
<td>LSR Group</td>
<td>113</td>
<td>JSC “TGC-2”</td>
<td>324</td>
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<tr>
<td>PJSC “RusHydro”</td>
<td>25</td>
<td>PJSC “Polyus Gold”</td>
<td>119</td>
<td>“KaznacheyFinansInvest” Group (RenCredit Bank)</td>
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<tr>
<td>PAO “Severstal”</td>
<td>26</td>
<td>Uralchem JSC (2014)</td>
<td>130</td>
<td>Synergy Group</td>
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<tr>
<td>PJSC “Aeroflot - Russian Airlines”</td>
<td>27</td>
<td>PJSC “Acron”</td>
<td>133</td>
<td>“Credit Europe Bank” Ltd</td>
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<td>PJSC “MegaFon”</td>
<td>28</td>
<td>PJSC “Enel Russia”</td>
<td>134</td>
<td>KOMOC Групп (2011)</td>
<td>360</td>
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<tr>
<td>PJSC “Rostelecom”</td>
<td>30</td>
<td>ABH “Miratorg” (2013)</td>
<td>136</td>
<td>“Vozrozhdenie” Bank</td>
<td>376</td>
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<tr>
<td>JSC “Magnitogorsk Iron &amp; Steel works”</td>
<td>31</td>
<td>SPAO “RESO-Garantia”</td>
<td>137</td>
<td>PJSC “Moscow Industrial Bank”</td>
<td>397</td>
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<td>PJSC “United Aircraft Corporation”</td>
<td>32</td>
<td>PJSC “Power Machines”</td>
<td>147</td>
<td>“Globex” Bank</td>
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<td>JSC “Gazprombank”</td>
<td>33</td>
<td>PJSC “Cherkizovo Group”</td>
<td>148</td>
<td>PJSC “KuzbasskayaToplivnaya Company” (TKT)</td>
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<tr>
<td>Metallinvest MC LLC</td>
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<td>Globaltrans Investment PLC</td>
<td>149</td>
<td>PJSC “Asian-Pacific Bank”</td>
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<td>PJSC “Dixy Group”</td>
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<td>OOO “BurovayaKompaniya Eurasia”</td>
<td>153</td>
<td>“Absolut” Bank</td>
<td>462</td>
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<td>No of Ratings*</td>
<td>Company</td>
<td>No of Ratings*</td>
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<tr>
<td>OJSC “ALROSA”</td>
<td>44</td>
<td>Credit Bank of Moscow</td>
<td>154</td>
<td>PJSC “RUSSIAN AQUACULTURE”</td>
<td>484</td>
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<tr>
<td>JSC “Alfa-Bank”</td>
<td>45</td>
<td>“Polymetal International” PLC</td>
<td>156</td>
<td>PJSB “TransCapitalBank”</td>
<td>521</td>
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<tr>
<td>JSC “Slavneft”</td>
<td>46</td>
<td>“VSMPO-AVISMA Corporation”</td>
<td>158</td>
<td>PJSC “United Wagon Company”</td>
<td>540</td>
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<tr>
<td>“EuroChem” Group AG</td>
<td>47</td>
<td>PIK Group</td>
<td>164</td>
<td>PJSC “Tatfondbank”</td>
<td>561</td>
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<tr>
<td>Lenta Limited</td>
<td>50</td>
<td>Rusagro Group</td>
<td>170</td>
<td>PJSJ “Amet”</td>
<td>571</td>
</tr>
<tr>
<td>JSC “Avtovaz”</td>
<td>51</td>
<td>PJSJ “Vostochnyy Express Bank”</td>
<td>171</td>
<td>JSC “AtomRedmetZoloto”</td>
<td>580</td>
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<tr>
<td>PJSC “M.video”</td>
<td>54</td>
<td>AlfaStrahovanie Group</td>
<td>182</td>
<td>JSC “Nordea Bank”</td>
<td>592</td>
</tr>
<tr>
<td>Russian Agricultural Bank</td>
<td>55</td>
<td>PAO “Sovcomflot”</td>
<td>187</td>
<td>PJSJ “RollMan” Group</td>
<td>add.</td>
</tr>
<tr>
<td>PJSC “Khanty-Mansiysk bank Otkritie”</td>
<td>58</td>
<td>Sollers</td>
<td>208</td>
<td>MoscowExchange MICEX-RTS</td>
<td>add.</td>
</tr>
<tr>
<td>OJSC “Protek”</td>
<td>59</td>
<td>Industrial Metallurgical Holding</td>
<td>211</td>
<td>PJSJ “Tattelecom”</td>
<td>add.</td>
</tr>
<tr>
<td>O’Key Group S.A.</td>
<td>61</td>
<td>JSC “Quadra – Power Generation”</td>
<td>216</td>
<td>PJSJ “Lenenergo”</td>
<td>add.</td>
</tr>
<tr>
<td>PJSJ “Mostotrest”</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total companies in the sample: 130**

* Rating RAEX 600 2015 by the rating agency “Expert-RA”
THE MANAGEMENT ACCOUNTING EVOLUTION IN CONDITIONS OF THE CZECH REPUBLIC

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Abstract
This paper deals with the concepts of Management Accounting and its evolution in the conditions of Czech companies in the period of centrally planned economy. The needs of detailed information of the internal processes for the purpose of its control, decision making and assessment there were as a result of growing fragmentation and complexity of the manufacturing processes in the middle of 19th century. Its development in the national condition depended on the economy system’s specifics, namely on historically determined experience, and based on them procedures used in practice. The aim of this article is to describe the stage of development of managerial accounting in the enterprises centrally planned system. We used the method of the contemporary legislation analysis as well as text-books and practical publications analyses, the ground of which lies in the contingency and institutional theory. The findings show that in the period of centrally planned economy the internal processes of centrally planned enterprises formed the space in which the elements of economic decision-making can be applied (company output and intercompany relationships were subject to planning) and cost accounting, budgeting and economic centres served as a useful tool for cost reduction and efficiency improvement. The transition process to market economy represents a new phase in managerial accounting evolution, which is under the influence of reconstruction of financial reporting and process of IFRS adoption as well as under the evolution in the managerial accounting itself and information technologies.

Keywords: Management accounting, decision making, management, institutional theory.

1. INTRODUCTION

1.1 Managerial accounting – definition
Managerial accounting is a term to describe a composite of techniques and procedures providing appropriate and timely information for managers on different levels and areas. The needs of information on the firms internal processes is rooted both in the processes themselves (the production process development and its organization) and in the process of the management of enterprises (Kaplan, 1984).

The content and scope of the concept of managerial accounting, however, is defined differently by different authors. For example taking into consideration the historical development, content of management accounting is defined as the highest in the developmental stages: (1) cost accounting, (2) internal accounting and (3) management accounting. Managerial accounting as the highest stage includes, besides the previous stages of information processing, methods, which across significantly beyond the borders of the previous stages.

Other differentiation is based on the methods used to process information and status within the firms’ management process. Here can be distinguished internal accounting, budgeting, costing, statistics, operational records.
Computer-based ERP systems, interconnected yet independent managerial accounting parts mentioned above into a single system. ERP systems based on a single input record the desired various outcomes for various need of the firm’s management. It allows to perform both elementary costing methods, and financially complex analytical procedures. The ERP systems are offered by software companies as a modularly ones. Each module represents usually a specific area of internal processes management, which requires specific system of information. The modules can thus be taken as the basis for defining the content of Management Accounting. The definition of them and the frequency of their use within a custom-designed ERP is presented in the next table:

Table 1. ERP Modules and frequency of its use

<table>
<thead>
<tr>
<th>The most frequently implemented ERP Modules</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Module (accounting, financial analysis)</td>
<td>77.20%</td>
</tr>
<tr>
<td>Payroll Module</td>
<td>60.40%</td>
</tr>
<tr>
<td>Reporting and Analysis Module</td>
<td>57.80%</td>
</tr>
<tr>
<td>Manufacturing Module</td>
<td>49.10%</td>
</tr>
<tr>
<td>Marketing and Sales Module</td>
<td>48.90%</td>
</tr>
<tr>
<td>Fixed Assets Module</td>
<td>42.60%</td>
</tr>
<tr>
<td>Budgets and Projects Management Module</td>
<td>34.40%</td>
</tr>
<tr>
<td>Manufacturing Processes Launch and Control Module</td>
<td>32.80%</td>
</tr>
<tr>
<td>All Modules (fully integrated solution)</td>
<td>19.90%</td>
</tr>
<tr>
<td>Supply Module</td>
<td>15.20%</td>
</tr>
</tbody>
</table>


1.2 Managerial accounting and its development

Relationship between the management and financial accounting is based on the fact that both have a single subject, which is a part of the reproduction process, taking place in the company as the basic organizational unit. Both systems, however, have different users and different purposes for which the produced information are used. In the early stages of accounting development both systems formed a single unit. The separation of managerial and financial accounting as different information systems was the result of further development of the displayed processes as well as the methods and procedures of information processing. The beginning of this process are dated to the 17th and mid-18th century as a result with the development of production technology and organization arising from the industrial revolution. The production process control in these new conditions increased demand for information. The main attention was focused on the area of cost accounting. Detailed information about the planned a real costs amount or revenues allow the periodic evaluation of their level. Waltham system, which introduced the concepts of direct and indirect costs, represents the next stage in the cost management development. In the next stage the procedures based on the economy of scale concept and sunk costs were introduced as well as the concept of present value and others.

The next development of the cost control took place in the late 19th and early 20th century, as part of the management development as a science discipline. Based on the new findings so called operational (intracompany) accounting have constituted. It was used and improved by T. Bata in his company in Zlin. This system was designed on the basis of detailed costing methods, accounting for costs based on final selling price. The purpose of it lies in motivation of the staffs: the reward of individual internal business departments and their staffs was bound on related cost reduction.

Financial accounting processes as immediate registration evidence within the enterprise gradually receded. The need of information for business owners/shareholders and other external providers of capital has increased due to continuing separation of the management and ownership. Growing capital markets required information to enable to assess the financial efficiency as a base for investment decisions. The accounting rules and the financial statements concepts presenting the businesses as a whole have gradually tightened during the 19th century. The role of the auditor as an
independent assessor of financial statements and its information reliability gradually increased along with that process.

Management accounting in the Czech economic environment developed in parallel with its development in other European countries. Expanding the functions of accounting is dated to the 18th century and is associated primarily with celebrities as K. P. Kheil and F. V. Jezerskij, H. Raulich, later F. Pazourek and next the generation of accounting researchers, i. e. J. Fiala, J. Fuksa. In the 2. and 3. decades of the 20. century T. Bata contributed to this discipline developing the management system really functioning in his firm.

At present, the development of management accounting as a scientific discipline and its practical application takes place during the transition process of the economy towards the one based on market principles. As in many other areas, methods and techniques that require successful performance of managerial and ownership functions are imported from traditional market economies. However, these methods are not completely new in these conditions as they were a part of their economic history. This paper aims to identify the components of managerial accounting, which were used as the tools in condition of the centrally-controlled enterprises and that is not necessary only to take over the experiences from abroad but it can be useful to see to the past.

2. METHOD

As a research method was used the analysis of historical documents, in particular, the wording of the regulations governing the accounting as a part of a centrally managed enterprises and other materials, characterizing the application of the regulations in the firms' practice as well as the textbooks and other academics materials. The aim of this research is determining how was the management accounting of the state enterprises regulated and to what extent it formed the part of the activities of the centrally managed enterprises.

3. MANAGEMENT ACCOUNTING DEVELOPMENT IN THE CZECH REPUBLIC

3.1 The period of 1945–1951

After the World War II the development of accounting included both financial and managerial (in-company) accounting followed on pre-war stage. In the pre-war stage the attention to the management accounting was considered as a part of business accounting. The system of T. Bata that was used in his company became a model for determining the general principles of internal accounting management in all state enterprises even after nationalization in 1946.

In 1946 began the development of Czech economy towards central and planned management. This has been reflected in the attempt to unify methods of accounting including costing and other elements of the information system. The aim and possibilities of T. Baťa system of in-company accounting was inline with the aim of the central planning to regulate the effectiveness in the state owned enterprises. The law on unified organization of corporate counting (Act No. 116/1946 Col.) was released by the Czechoslovak parliament in 1946. The term „corporate counting” covered several areas i.e. bookkeeping, costing (calculation), budgeting and statistics. The information gained from this system should serve the needs of economic planning of companies and the national economy as a whole. The aim was to ensure monitoring of production costs and prices. The basic principles of the enterprise management and control was initially the „self-governance” – these goals fully meet the system of in-company centers accounting and other management methods introduced T. Bata.

Concurrently with this law there were released other laws and regulations, that ensure unified economic circumstances. The regulation No. 205/1946 sets out the basic principles of accounting based on the principles of double-entry bookkeeping. Two years later the government regulations No 165/1948 laid down the uniform costing principles. Cost accounting should provide documentation particularly to ensure efficiency and control processes within the company, for creating and control
of prices. At the same time, it should assist in the nationwide economic planning. The rules for cost accounting were therefore relatively fixed detailed and binding for all state-owned enterprises including the precise requirements for industry specifics. Companies ought to perform preliminary and final cost structures (calculations), in binding format of costs. The cost structure should be constructed in such a way that is provides data for other fields of corporate accountancy and allow mutual authentication and comparison of data.

The main purpose of this unified information system was to provide the data needed for economic regulation and planning on various levels of national economy. At the same time it enabled monitoring of the efficiency of enterprises and their management provide the tools to manage the cost at that place where they were incurred. Later it became a bases for the whole system of enterprises economic behaviour, named from the Russian language as “chozrasčot”. In the condition of centrally planned economy thus has been on microeconomic level formed a space where the enterprise was run as an independently operating entity, despite the relation to the central control and the planned development of the whole economy.

3.2 The period of 1951–1960

The increasing centralization of economic management and development of economic planning in 50th changed the nature of accounting and corporate accountancy in comparison to previous adjustments. The gap between the business view on accounting and macroeconomic planning was addressed the Act No. 108/1951 on the organization of national economic evidence. National economic evidence covered three areas – the operational and technical evidence, financial reporting and statistics. The task of accounting evidence was to provide supporting information for the management of individual businesses and other entities and also for the national economy as a whole. It involved only the resulting calculation of the costs of the production. The accounting evidence thus has addressed the role to register only the past performance, but not to provide timely information on deficiencies and inefficient development, which could otherwise be effectively prevented.

In this period the accounts were drawn as a single circuit (instead of dual circuit accounting in the previous period), involving only financial accounting of business as a whole.

The exclusion of cost accounting from the central evidence lead to another practice: companies started to use a special in-company evidence for purposes of management of in-company processes. Accounting evidence thus seemed to be superfluous: registering only the past performance, while not being able to provide timely information on deficiencies and inefficient development, which could otherwise be effectively prevented.

3.3 The period of 1960–1971

With the efforts to reform the economy in the 60th new elements were penetrated into the national economic evidence. The aim was to a strengthening features of management (cost) accounting. The national economic evidence/accounting in the meaning of economic information system should provide a basis for calculations, budgeting, planning of profit generation and its subsequent distribution and create the conditions for monitoring intra-branch relations. The aim was to depict the economic processes in the company so that it can be effectively controlled with the plan and for the improvement of the planning process as well as to enable evaluating results of individual responsibility centres within the enterprise in fulfilling the planned goals.

At this period there also appeared requirements associated with automation of data processing. Soon it became apparent, however, these requirements could not be achieved by simple refining and stepwise improvements of current system, but there was a need for a radical reconstruction of the accounting system as a whole.

In 1966, the government forced regulations on uniform costing principles, depreciation of fixed assets and reproduction financing of capital assets. These regulations brought further deepening as well as further unification of evidence in businesses (to greater details). These procedures concerning the financial accounting used the categories of preliminary and final cost calculations.
Calculations had to be comparable in substance and in formal presentation. Accounting in enterprises was also unified by a single chart of accounts. This replaced the previous sectoral chart of accounts.

In this new accounting adjustment the double-circuit accounting was restored. Accounting was divided into the basic circuit and in-house circuit. Basic circuit should provide information on economic performance of the company as a whole in relation to the value indicators of a plan. It served for economic management and for the need of superior bodies. The in-house circuit provided information for monitoring and evaluation of processes in the internal profit centres. These adjustments represented a significant change in the overall regulation of accounting.

According to the Act of 1967 on the system of economic information, the accountancy was considered to be a part of new system of economic information. The system included internal accounting, budgeting, business statistics and preliminary and final calculations (costing). It was similar to the former national economy evidence, but it approached the accounting from the perspective of individual business. In the second circuit (in-company accounting), the system included a dual accounting for costs. The costs were primarily broken down by cost types, and secondly by business economic centres (by business activities and by purpose). Profit or loss was included in the period in which it arose. This was in contrast to the previous adjustments according to which the profit was recognized only in the period in which final products were realised.

The system of presentation of income statements also changed. In this way, separate income statements were prepared by business centres (based on the cost broken down by profit centres) and by the enterprise as a whole (based on the cost broken down by cost types).

The period of economic information system represented the preliminary stage of a uniform system of socio-economic information, which brought in new provisions of the Law No. 21/1971 Coll. for a uniform system of socio-economic information of enterprises.

3.4 The period of 1971–1991
The two decades, the 70th and the 80th is a period of so called „uniform system of socio-economic information“, which replaced the previous „system of national economic accounting evidence“. Socio-economic information was prepared by an information system of organizations. It consisted of several parts: accounting, budgeting, statistics, costing, operational records and individually organized records, passports and registry and the information contained therein.

This change was based on the Law No. 21/1971 Coll. for a uniform system of socio-economic information. The central body of its supervision was the Czech Statistical Office, whose responsibility was to monitor and statistical evaluate of socio-economic development of the economy, the compilation of the balance of the national economy and some more specific tasks. Furthermore, the Ministry of Finance had a central role in the areas of accounting, budgeting, costing and financial reporting. An information system of organizations (ISO) was created in this way. It has become the legal basis for changes in valuation that took place at the start of 70th.

More changes occurred in 1976. Most importantly, the new uniform chart of accounts for business organizations was established. The company profits were presented in two ways, the gross and the net method. The gross method was used in monthly income statement. The net method was used at the end of the year in the profit and loss account. The costs were accounted for in subdivisions (Accounting classes). At first primary costs were organized by cost types from the costing standpoint (standpoint of purpose). Furthermore, the separate costs of individual activities were identified which then lead to costs of realised output. By this adjustments, the accounting fulfilled many functions: recording of processes, monitoring of implementation the plan and providing basis for planning. At the same time the accounting results should serve as material incentives.

4. CONCLUSION
Management accounting in the Czech Republic has developed in a similar way as in other industrial countries in close linkages to industrial development. Its development has extended from
development of organization of production linked to mediation of information in different variants of arrangements of accounting records. Rationally organized records of company costs gradually become a natural part of business accounting.

Development of managerial accounting in the Czech Republic in the period of centrally controlled economy followed from this history. During the period of centrally planned economy the components of accounting that are currently classified as elements of managerial accounting were closely linked to financial accounting. They were uniformly regulated and they were mandatory for most entities. Companies have created conditions for internal (managerial) accounting at the account level defined for these purposes. The main attention was devoted to cost accounting and costing schemes closely linked to the internal accounting and the system of cost centres. Budgeting had a specific position as an instrument to internalize the tasks laid down to the company under a State plan. The purpose of internal managerial accounting was not only preparation of reporting reports for planning, but also increasing the efficiency of internal business processes.

Acknowledgment
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REFERENCES
ETHICS, CSR AND STANDARD IMPLEMENTATION ISSUES
Abstract

The aim of this paper is to analyse actual questions about standard-setting and enforcement of international standards. The standards nature is highlighted in the first part of paper (par.1). Definitions of the concept of “standards”, the aim of standardisation, standards quality, a nes, specific standards classification a role of standards is presented and standards as an important part of financial regulation are discussed. In par.2, standard-setting process is analysed. Topical theories about standard setting are briefly described. Principally, the standard-setting process is considered to be a type of complex “bargaining” processes. In Par.3, barriers to standard-setting are discussed and 5 “pitfalls” formulated and analysed: 1. Real economic processes which are to be standardised may change before a compromise on the final standards wording is found which prevents a standard to be implemented. 2. An irrational (individual and/or collective) behaviour – often due to an impact of media – prevents standards to be set up. 3. The absence of sanctions as a factor undermining the effectiveness of standards implementation. 4. Legal avoidance of standards. 5. High cost of standards implementation. A final discussion of negative impacts of economic, social, political, and other factors (such as lobbyism, corruption etc.) is presented and positive recommendations explained.

Keywords: IFRS standards, standards classification, barriers to standards implementation

INTRODUCTION

The aim of this paper is to analyse actual questions about standard-setting and enforcement of international standards and to analyse barriers to international standards setting. Selected international organisations documents and papers were used to illustrate the diversity of views on the analysed questions. Some of the author’s views (for example, his classification of factors, the relevance of presented barriers, the proposed recommendation for the Czech milieu, etc.) may not coincide with the current approaches.

1. SUBSTANCE AND ROLE OF STANDARDS

1.1 What is a standard?

Our brief survey of different meanings of the word “standard” will be illustrated by selected characteristics from dictionaries.

The Free Dictionary (2016) defines the word “standard” as “an acknowledged measure of comparison for quantitative or qualitative value; a criterion,” and as “An object that under specified conditions defines, represents, or records the magnitude of a unit. Merriam-Webster Dictionary (2016) thinks that a standard is “something set up and established by authority as a rule for the measure of quantity, weight, extent, value, or quality.” Dictionary.com (2016) offers 5 nouns; a standard is “1. something considered by an authority or by general consent as a basis of comparison; an approved model, 2. an object that is regarded as the usual or most common size or form of its kind, 3.a rule or principle that is used as a basis for judgment, 4. an average or normal requirement, quality, quantity, level, grade, etc. and 5. standards, those morals, ethics, habits, etc., established by authority, custom, or an individual as acceptable.” BSI Group (2016): “In essence, a standard is an agreed way of doing something. It could be about making a product, managing a process, delivering a service or
supplying materials – standards can cover a huge range of activities undertaken by organizations and used by their customers. ... Standards are the distilled wisdom of people with expertise in their subject matter and who know the needs of the organizations they represent – people such as manufacturers, sellers, buyers, customers, trade associations, users or regulators.”

FSB (2016) definition of standards is very brief: “Standards set out what are widely accepted as good principles, practices, or guidelines in a given area.” It is a striking example of laconism. (FSB. What standards are?)

A popular design of explanation of international standards is offered by ISO (2016): “What are standards? International Standards make things work. They give world-class specifications for products, services and systems, to ensure quality, safety and efficiency. They are instrumental in facilitating international trade.”

A “universal” definition (i.e. a universally accepted definition) does not exist; specific purpose-oriented definitions are to be set up according to research needs or practical tasks. As an example IFRS Standards (2016) definition is quoted: “International Financial Reporting Standards (IFRS Standards) is a single set of accounting standards, developed and maintained by the International Accounting Standards Board (the Board) with the intention of those standards being capable of being applied on a globally consistent basis—by developed, emerging and developing economies—thus providing investors and other users of financial statements with the ability to compare the financial performance of publicly listed companies on a like-for-like basis with their international peers.”

1.2 A Multi-criterial Standards Classification

For research purposes, a reasonable classification of standards can be helpful. A multi-criterial standards classification is presented in Table 1.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>sectoral (government and central bank, banking, securities, and insurance industries, and the corporate sector); functional (governance, accounting, disclosure and transparency, capital adequacy, regulation and supervision, information sharing, risk management, payment and settlement, business ethics, etc.)</td>
</tr>
<tr>
<td>Standard-setter type</td>
<td>national body, international body; private company, private institution (research institute etc.)</td>
</tr>
<tr>
<td>Spatial dimension</td>
<td>national, international; local, regional</td>
</tr>
<tr>
<td>Implementation perspective</td>
<td>principles, rules, methodologies, guidelines, practices, recommendations</td>
</tr>
<tr>
<td>Validity/ power</td>
<td>de iure, de facto; with sanctions without sanctions; key standards, others</td>
</tr>
<tr>
<td>Standards quality</td>
<td>relevant and critical; universal; flexible; broadly endorsed; assessable</td>
</tr>
<tr>
<td>Prevailing beneficiary</td>
<td>investors (shareholders); management; creditors/debtors; governments, standard-setters</td>
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</tbody>
</table>

Sources: own elaboration, based on FSB, FASB and other documents

Our classification substantially widens the FSB classifications: it introduces 6 further criteria which are – in my opinion – very important for research on standards in Eastern European countries. For example, the 4 last criteria have been used as a basis for Czech research on IFRS implementation problems. (Jindrichovska et al., 2014; Kubickova et al., 2014)

It is generally accepted that standards are useful, as they bring economic and other advantages for they users. According to ISO (2016), its standards “ensure that products and services are safe, reliable and of good quality. For business, they are strategic tools that reduce costs by minimizing waste and errors and increasing productivity. They help companies to access new markets, level the
playing field for developing countries and facilitate free and fair global trade.” However, the average standards quality does not always correspond to this demand.

During the last years, a discussion on the standards quality has been going on. There are two standards “limits of quality”: on one side, standards maximum quality is demanded (the standards “excellency”); on the other side, the opinion prevails that – because of the standards-setting process character – only minimum standards can be implemented. This is the reason why the standards implementation probability has to be analysed ex ante.

1.3 Standards and regulation
Academically, any standard can be (not with much precision) characterized as one of the manifold forms of regulation. Some vocabularies (mainly produced for business users) take the word “standard” as a synonym of the word “regulation”. This, in fact, implies a concept of regulation which embraces many different forms – principles, rules, guidelines, practices, recommendations etc. without distinguishing these “quasi-synonyms” from the word “regulation”.

Regulation can be characterized (for our aims) as a “lack of organisation”, i.e. a chaos. Regulation is a process trying to reduce the “chaos” to a certain level which corresponds to the actual needs of human society. From this point of view, it is rational to prefer regulation to chaos – which is ultima ratio proving the necessity of socio-economical regulation. Ergo – briefly speaking – the existence of standards (IFRS and other forms of standards) is indispensable. However, regulation per se should not be chaotic (as it – unfortunately- in many cases is). One of the causes is the standard-setters competitions, as Sunder (2002) – long time ago - found out.

This digression was necessary for a better understanding of the standard-setting process.

2. THE STANDARD-SETTING PROCESS

2.1 What is standard setting?
Many different standard-setting process definitions can be found in literature, as the national and international standards-setters approaches, their policy pursued, the implementation ways of this process etc. cannot be the same. Let us briefly describe the FASB approach as an example of the attitudes one of the most competent international institutions.

The standard setting process, as it is defined by the FASB Rules represents “operating procedures, including the due process activities that are to be open to public participation or observation to provide transparency into the standards-setting process.” (FASB. 2016) FASB standard-setting process consists of 10 steps (phases). The FASB Board is bound “to issue standards when the expected benefits of a change justify the perceived costs of that change.”

2.2 Who can “standardize something”?
If we examine the standard-setting history, the answer is plain: at the beginning, practically everybody who was able to do it and sell his product to users. Nowadays, there are numbers of standard-setters, the list of whose is changing. As an example, the BOX 1 presents a short-list of the recognised standards-setters for financial accounting, reporting and auditing.

Gipper, et al. (2013, p. 1) emphasized that “Even casual observation of the standard-setting process suggests that politics can have a first order effect on how accounting standards are set” and proposed a line for future research on this field.

<table>
<thead>
<tr>
<th>BOX 1. Selected International and National Standard-setters (financial accounting, reporting, auditing)</th>
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<tr>
<td>Financial Accounting Standards Board (FASB). The mission of the FASB is to establish and improve standards of financial accounting and reporting that foster financial reporting by nongovernmental entities that provides decision-useful information to investors and other users of financial reports.</td>
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International Financial Reporting Standards (IFRS). The IFRS Foundation is an independent, not-for-profit private sector organisation working in the public interest. Its principal objectives are: to develop a single set of high quality, understandable, enforceable and globally accepted international financial reporting standards (IFRSs) through its standard-setting body, the IASB; to promote the use and rigorous application of those standards; to take account of the financial reporting needs of emerging economies and small and medium-sized entities (SMEs); and to promote and facilitate adoption of International Financial Reporting Standards (IFRSs), being the standards and interpretations issued by the IASB, through the convergence of national accounting standards and IFRSs.

Governmental Accounting Standards Board (GASB). The Governmental Accounting Standards Board (GASB) is the independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.


Some of the barriers to the international standard-setting (see par.3) are based on a rather chaotic selection, use and/or interpretation of a number of theories. Let us cite a few examples to illustrate the different authors approaches since the mid-seventies of the last century: Papadopoulos, (2011); Holthausen, Watts, (2001); Majone (1975). The differences correspond to the different periods of the standard-setting history.

3. BARRIERS TO STANDARD-SETTING PROCESSES

3.1 The relevant factors differences

There are many factors which influence the standard-setting process from its very beginning till its implementation. In this paper, these factors are divided into 5 specific groups, i.e. technical, economic, political, legal, social factors. Every factor has a specific nature, because of which it differs from any other factor. However, all these factors – as a whole – represent a system, whose parts are interconnected. And more than that: every factor (as a part of the integral system) can be divided into sub-factors). From the point of view of a standard-setting process, the more the characteristics of a specific factor (or a sub-factor) are known to standard-setters and all other subject taking part in the laborious process, the better is the chance of its future implementation. This is one of the reasons, why the standard-setting process is complex from its beginning to its end. The above enumerated factors are not ranked; this is (from the standard-setting process view) irrelevant, because - during the standard-setting process - the relevance of factors interconnectedness may change (and most probably always is changing). Let us give a few examples. During the (relatively) long period of economic growth before the last economic and financial crisis of 2007, the technical factors (innovations in most industrial branches, internet etc.) were the driving force of the remarkable economic development and growth. In turn, the achieved results on the techno-technological development were projected into all other factors (political, social and legal). However, the absorption speed of techno-economic changes was reflected in the changes of socio-economic factors in different countries in a different way. The globalisation process has been going on, but its impact on different parts of the world was not the same. In many respects, the crisis paved the way for many negative phenomena, but – at the same time – it was the beginning of a struggle for important reforms. Inter alia, a new stage of financial regulation was started; a strive for financial stability was internationally accepted as a new long-term goal on the road of the expected economic and social growth all over the world. The new design of regulation was reflected on the field of standard setting as well: an immense flood of new standards and regulations of all forms set up both by national and international standards-setter started. However, this does not mean that nobody objected to this new course: everywhere it was liberals who were dissatisfied with the primacy of regulation and lack of respect to ruling
theories. As for the field of accounting, auditing and reporting standards, important changes came as well. Actually, the dominancy of the Free Approach is over, and Regulatory Approach prevails. To conclude it is worthwhile to comment on the growing role of the new phenomenon of social networks. It is not excluded that they could influence the standard-setting processes in the near future. It would be interesting to analyse the potential power of this emerging factor.

From the theoretical point of view, some other approaches could be interesting and helpful, for example, the organizational theory (Jensen, 1998, p. 3) and institutional theory (DiMaggio and Powell, 1983, p. 149). According to Jensen, the organisational theory “will explain why organizations take the form they do, why they behave as they’ do, and why accounting practices take the form they do. Because such positive theories as these are required for purposeful decision making, their development will provide a better scientific basis for the decisions of managers, standard-setting boards, and government regulatory bodies.”

The standard-setting process (i.e. standardisation) leads to homogenization which can be characterized as isomorphism. According to DiMaggio and Powel, “Isomorphism is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions.“It would be interesting to compare the relations between the above approaches.

3.2 The nature of barriers
The reason why this paper was called “On Pitfalls of Standard-setting” was the fact that the standard-setting process involves, on one side, not only some possible negative impacts for all its participants (i.e. not only a standard-setters risk), but – on the other side – for standard-users as well. They are those who bear the cost (or a part of it, at least) stemming from the standards implementation, and – in many cases – no or negligible benefits. The standard-setting process – per se – is a never-ending fight among partisans and adversaries of a standard, a standard-setter often being a “judge” between the both fighters. This concept, by the way, is reflected in its scientific version, i.e. in different standard-setting-explaining theories. A revealing comparison of the Free Market Approach and the Regulatory Approach was prepared by Sottoriva (2013, p.78): “Free Market Approach isn’t a suitable approach for enactment accounting standards because of asymmetry information and free riding and other reasons that exist and the fall of market is witness of this matter. In contrast, Regulatory approach is more suitable choice for enactment of laws and regulations ...“Although this judgment is based on American experience from the 90ties, it is topical for EU as well. A stricter implementation of the Regulatory Approach is also necessary for the Czech Republic. The disregard to financial regulation and damages caused by free-riders should be severely punished. However, the disadvantages of the Regulatory Approach should not be underestimated. As for accounting standards, these disadvantages consist of standards circling, unnecessary causes of standards and of an increasing accountants numbers.

A pitfall is an obstacle complicating both any standards-setting process and its expected implementation. One of the differences between national standards and international standards consists in the fact that at the national level, any “fighter” may be punished by some of the defined legal sanctions (“the snares and pitfalls of the law”). At the international level, the situation normally is quite different, as most international organisations principles, rules, best practices, recommendations etc. do not include sanctions: the international standards seem to be “toothless”. Powerful “top” international organisations dispose of different means how to coerce the rebels (or potential rebels); up to the last year, it would be something extraordinary to sanction any of the “big players”; the actual confused “state of affairs” at the international stage set forth a possibility of a specific flexible world-wide sanction-bargaining.

Very important obstacles to standard-setting processes sometimes quite easily can be changed to barriers; the menu of the “worst practice” is manifold: delaying or disrupting, or preventing to finalise the started standard-setting process and so on.. This phenomenon is well-known on the international political and/or economic scene.
As for the domain of our interest, i.e. the field of international standards for accounting, auditing, reporting, practically the same above described forms of events are actually present in practical standards-setting policy.

3.3 A short-list of barriers explained
Selection of topical (mainly after-crisis) literature enables to set up a “short list” of 5 barriers (“pitfalls”) omnipresent (in a different extent) in many countries; at present, by these barriers the standards-setting process and the standards implementation process may be (and in some cases) really is intoxicated. Let us discuss the following items list, one by one:

**Barrier 1.** Real economic processes which are intended to be standardised by the competent authorities may substantially change before a compromise on the final standards wording is found which prevents a standard to be – duly and in time - implemented. It is hard to say, whether the existing standard-setting practices could be substantially modified. As for democratic states (i.e. state with democratic political regime at a different stage or level), the periodical process of democratic elections represent a permanent danger for politically “popular or unpopular” standards. As for economic factor impacts, the upward phase of a cycle normally is more friendly to standard-setting processes. As for the downward phase, it is hard to say what the result would be; every member of a group of future standard-users would have to calculate his cost/benefits probable result. Without having necessary analyses, it is premature to predict any answer; the use of the rule of thumb is frequently mis-used for political reasons. In literature, proposals of using the theory of games already exist (Swinnen et al. 2015; Baskerville 2007, p.6).

**Barrier 2.** Irrational (individual and/or collective) behaviour – often due to a confusing and/or a seducing impact of media - prevents standards to be set up or predestine their sub-optimal quality. A local (Czech) example: medial campaigns supporting or rejecting changes of technical standards (water, electricity, gas, agriculture etc. proposed by the government) usually have a form of market manipulation. Very negative effects on standard-setting are caused by lobbyingism and corruption. By Ahmad. (2015, p.34-36) analysis showed – _inter alia_ – that the size of the lobbying company, the possible effects of the act or statement on the financial performance of the enterprise, according to the perceptions of the managers of this firm are very important factors; and: “the determinants of lobbying could be related both to the company-specific and country-specific factors.” And more than that: the analysis of literature “indicated the importance of the industry level in terms of the propensity of companies to lobby and the effects of lobbying on standard setting in accounting.” A relevance of lobbying on the standard setting-process is growing: 12 papers from the 21 analysed papers were written after the year 2010. A deep insight to the lobbyism was presented by Shields (2014), disclosing the lobbying practice on the field of accountancy standards in Great Britain. In the Czech Republic, the lobbyism – up to now since 1992 up no now - practically has been unregulated, the godfathers (“padrini”) power still is relatively high and no new regulation has been approved as yet. For the Czech Republic, this is one of the topical legislative issues.

**Barrier 3.** The absence of sanctions as a factor undermining the effectiveness of standards-setting and standards enforcing (both of national and international) belongs to the most dangerous barriers to standard-setting and to standards implementation, monitoring and recoding as well. In the Czech Republic this mainly relates to the national standard-setting processes, as the CR role in the international standards creating is negligible.

**Barrier 4.** The legal standards avoidance. This is a well-known domain of big international companies which use a lot of forms of standards avoidance or circumvention. Up to now, the Czech government has not been much involved in these questions. However, it is a raising issue.

**Barrier 5.** The high cost of standards implementation. This is a real night-mare for standard-setters. The equation stating that “more complex standards = higher cost” probably cannot be solved. Frequent discussions of typical tasks about the relations of “lower cost to the higher safety”, or a discussion about “lower cost and higher profit/efficiency” may result in a _circulus vitiosus_ of controversial arguments. A successful Implementation of standards may bring lower (total) cost, but may increase the cost necessary for a secure standards use, protected by law.
CONCLUSION

The barriers to standard-setting cannot be removed or diminished without mutual trust, advantages sharing, effective sanctions against tress-passers. However, in a world of an organised chaos and chaotic regulations where respect of rules is missing, this is very difficult to achieve, if not impossible. However, a step-by-step method, if used on the field of financial standards modification, is a promising way in the next future. At present, the political factors represent a main power of influence on the standard-setting process. If the system of international standards setting would be developing according to FSA principles, a real progress could be achieved. Last but not least, a few words about the Czech Republic have to be dropped: in my opinion, the most important task for the next future is to educate and force all Czech standards-setters and standard users to respect the laws. If this would be achieved, a broad space for a further progress on the field of standards in my country would be opened.

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OBJECTIVITY IN FINANCIAL ACCOUNTING:
IT CANNOT EXIST

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Abstract
The general public tends to consider Financial Accounting as a set of scientific and objectively grounded techniques, suitable, if properly used, to offer the “real” representation of the value of those items measured. Nonetheless, Financial Accounting leaves a wide room for subjectivity, even when professional Accountants act in full respect of existing rules. This paper discusses the issue and, after providing a general overview of the main ideas regarding the existence of Objectivity in Social Sciences, moves to study three selected segments of Financial Accounting where decisions involve a certain degree of Subjectivity: writing off receivables, depreciation and estimating the Fair Value. Overall, the paper highlights how the very decisional process in all three cases is strongly characterised by a certain degree of subjectivity. It contributes to disseminate information and knowledge about an aspect of Financial Accounting which is often misunderstood by the public.

Keywords: Financial Accounting, Objectivity, Subjectivity

INTRODUCTION

This paper discusses how, contrary to a popular misconception of the very subject, Financial Accounting is not and cannot be objective. Indeed, the decision underpinning the representation of financial information requests often subjective assessments from the side of the very Accountants and/or the standard-setters involved. This goes irrespectively of the respect of the ethical and legal standards set by the various authorities involved with the regulation of the collection, recording, interpretation and transmission of financial information. In other words, this paper does not discuss those techniques and methods used to voluntarily distort the quality and meaning of financial information. Indeed, our paper studies how Subjectivity characterises several accounting decisions even when the Accountant acts in full respect of the existing rules and his/her action is not tainted by malicious intentions.

The public tends to consider Financial Accounting as a mechanical recording of transactions, whose monetary value is given and objectively determinable. Reality is far from conforming to such a stereotypical view of Financial Accounting. Accounting operators complement objective data (like the price paid for a specific item) with decisions based on their own subjective assessment of a given item or of the probability that a future event may arise or not (and, eventually, to what extent). True, sometimes Accountant’s decisions are (more or less strongly) constrained by rules or guidelines. However, even the very rules/guidelines are often devised on the basis of subjective assessments.

Our paper is divided into two main segments. The first will discuss the general problem of Objectivity in Social Science. For a long time, information provided through numbers has been considered (almost) automatically objective, whereas nowadays there is a more mature approach to the issue. The second part of our paper will discuss three exemplary cases where the decisions of the Accountant are necessarily taken on the basis of a subjective assessment of various factors, even when there are standards attempting at offering guidelines or rules.
1. OBJECTIVITY IN SOCIAL SCIENCES

The possibility to come with objective knowledge (knowledge based on objective evidence and reproducing Reality as it is) is probably the main goal on any scientific investigation. However, Scientists have been discussing whether this is possible and whether the aim of Science should be to come to objective knowledge at all (Chalners, 1999). Popper (1934, 1959) maintained that Science is a constantly open-ended process where there is no certainty about the correspondence between discoveries and reality, as successive investigations can always falsify any investigation run according to rigorous methods without any claim to open the doors to the final knowledge about any matter. This idea straddles with the Realist or Positivist (these terms are not inter-changeable, but are used inter-changeably here for the sake of simplification) paradigm, according to which the task of any Scientist should be the discovery of Reality. This latter paradigm moves from two presuppositions: one ontological (Reality exists) and one epistemological (A Human being can come to discover Reality). This credo is deeply rooted in the popular understanding of Science, and has for a long time characterised the spirit of several treatises on Research Methods (Brymer, 2016). Researchers subscribing to these philosophical underpinnings in general prefer the use of the deductive methods, formulate hypothesis and test them using quantitative (statistical, in particular inferential statistical) methods. This approach has been indicated as the “true” scientific approach for a long time (De Vaus, 2002).

On the other side, there is another philosophical school, often referred to as Constructionism (or also Interpretivism but different authors may attach different meanings to these terms), which moves from different presuppositions (Remenyi et al., 2013; Denzin and Lincoln, 2000). The proponents highlight how the “Positivist” approach described above is replete with limitations. Even the most sophisticated quantitative methods are imperfect and present their own shortcomings. The evidence provided through the use of the “true” scientific methods is always falsifiable by successive research. Scientists constantly update their knowledge and change their mind regarding the correspondence of specific beliefs with Reality. The proponents of this Constructivist School of Thought maintain that Humans cannot discover Reality objectively (epistemological limitation, Humans are incapable to discover the scientific “Truth”). Moreover, certain authors insist that Reality does not even exist independently from the conscience of the very researcher involved (ontological problem, Reality does not exist). The task of the Researcher is to reconstruct perceptions and interpretations of what exists in the mind of the very Humans who are creating their own Reality. This type of approach to Research usually follows the so called Inductive method, does not make use of hypothesis and relies on qualitative methods of collection and analysis of data (unstructured interviews, ethnography, Grounded Theory). For a long time, this particular approach to Research has been labelled as “unscientific” and definitely inferior in comparison with the one described in the previous paragraph. Nonetheless, the importance of such an approach is now better appreciated, also especially in view of the actual limitations of the Positivist-supported techniques in terms of their capacity to capture Reality. The state of the art of the ideas regarding the effectiveness of the various Research methods/approaches tends to avoid declaring one particular approach superior. Indeed, both of them have full academic legitimacy and the use depends on the type of research question the scholars are after and not on an intrinsic “superiority” of either method. There are also mixed philosophical paradigms, which are neutral regarding the existence/non existence of Reality but in any case deny the capacity of Humans to discover it. The use of quantitative and qualitative methods in the same study (Triangulation) is also common in the field of Social Sciences (Tashakkori and Teddlie, 1998). All these points are formulated here to highlight the complexity of the issue of Objective Discovery of Reality.

One common misunderstanding is to confuse numerical data with Objectivity. For a long time, the general public has tended to consider facts as objectives only because conclusions were supported by numbers, without taking into any account the several limitations embedded in the various existing quantitative methods. Any automatic equation between quantitative methods and Objectivity reveals serious ignorance from the side of the person formulating such an equation. Hofstede (2001), who
has studied and classified cultural dimensions using quantitative methods, has honestly declared that there is no Objectivity in Social Sciences (which amounts to a very strong epistemological stance). According to certain scientific paradigms, the task of the researcher is to devise appropriate methods to reach an acceptable and sufficiently reliable level of knowledge. Further research may fortify previous discoveries or dismiss them, but also in the former case research is an open-ended process when no Scientist can legitimately claim having said the last word on any issue.

Financial Accounting is a Science based on numbers, but the very process underpinning the association of any accounting post with a particular number is often based on subjective decisions. The very clerical process of recording entries may contain a high level of automatic registration, simply speaking writing down how much money has been spent and received in specific transactions. However, Accounting requests by far more than a purely clerical record of transactions. There are processes which request the Accountant and/or the standard-setters to make their own evaluations which go far beyond an automatic recording of objectively existing numbers. The next section will expound on some of them.

2. WHEN ACCOUNTING BECOMES SUBJECTIVE

Below we will discuss some cases when accounting decisions become subjective. The very term “subjective” does not imply any assessment of the scientific/non scientific connotation of the very process and of the result of it. The term imply only the fact that the result of the decision is characterised by decisions taken by the very Accountants on the basis of his/her own personal assessment.

The first process we describe is the process of determination of the Depreciation of Assets. This means calculating the loss of value of Assets during their continued use. One possible method is the so called” Straight Line Depreciation Method” which works in the following way 1) the Accountant determines how long the Asset will be usable (economic life) 2) an equal amount of money is deducted on annual basis from the value of the asset as declared in the Balance Sheet 3) the Accountant decides regarding the eventual existence of any monetary value even after the asset is no longer usable (residual value, i.e. the monetary value a company may eventually obtain through the disposal of outdated machinery). These decisions need to be taken as soon as the Asset is represented in the Balance Sheet for the first time and certainly involve a certain (high?) degree of estimation and, eventually, approximation. How is possible to predict the economic life of a tangible asset like, for example, a car? Each single type of car and eventually each single model has its own economic life which cannot be predicted at the moment of purchase with certainty. How can an Accountant realistically anticipate the residual life of the same asset 5 years prior to its eventual disposal? It is clear that there are no methods allowing to identify with precision and “Objectivity” such values. The issue probably becomes even trickier if we consider alternative methods of Depreciation (i.e. Accelerated Depreciation), when the value of Depreciation is not distributed equally across the economic life of the Asset. Discussing about the advantages and disadvantages of the various Depreciation (and Amortization, loss of value of Intangible Assets) methods would definitely and greatly exceed the limited scope of our paper. Nonetheless, the determination of the economic life, yearly loss of value and eventual existence of residual life cannot be done without recurring to estimations.

Obviously, Accountants have their own systems devised to perform with the task to establish the Depreciation of Assets. We are not saying Accountants are given a free hand to take decisions just according to their own personal taste or opinion. There are guidelines released by professional associations, standard practices and past experiences which drive the choice of the professional Accountant. As long as a given Accountant follows these traditional guidelines, his/her decisions are somehow understandable by the general community of users of financial statements. For example, IAS 16 provides guidance and sets rules for the calculation of Depreciation (www.iasplus.com, www.ifrs.org) of Property, Plants and Equipment(other standards govern the accounting treatment of
specific assets like for example biological resources). According to the IAS 16, “the depreciable amount (cost minus residual value” should be allocated on a systematic basis over the asset’s useful life” (http://www.iasplus.com/en/standards/ias/ias16). The relevant value should be reviewed at the end of each reporting year and divergences from estimates should be duly accounted for according to IAS 8. The depreciation method should be reviewed at least annually and, if the pattern of consumption of benefits has changed, the depreciation method should be changed prospectively as a change in estimate under IAS 8 (IAS 16.61). Depreciation begins when the asset is available for use and continues until the asset is derecognised, even if it is idle (IAS 16.55). Moreover, this year (from the 1st January 2016) has witnessed the entry into force (but earlier application was permitted) of the 'Clarification of Acceptable Methods of Depreciation and Amortisation (Amendments to IAS 16 and IAS 38)', where, among other issues, it is stated that the use of a revenue-generating method is not appropriate. The Amendments to both standards has come at the end of vivid discussions (see http://www.iasplus.com/en/news/2014/05/depreciation).

The points raised in the previous paragraphs are examples, among the many available ones, of rules devised to introduce standards useful to come to a rationalised system for the calculation of Depreciation, harmonising standards and practices. Other examples can be found in the documents released, often as legal rules, by the various bodies responsible for the determination of Accounting Standards at a national level. The aim of all these rules/guidelines is to create clarity regarding the calculation of Depreciation.

On the other side, even if we consider also all the rules/standards mentioned above, the calculation of Depreciation still involves a subjective judgement, as admitted by the very IFRS Interpretations Committee (http://www.iasplus.com/en/projects/completed/assets/ias-16-ias-38-depreciation). Guidelines and past practices may only offer general indication of the average yearly loss of value, final residual value of a general type of item. However, they cannot capture the specific value of a particular asset, i.e. the particular car purchased by the particular company. Each asset has its own life and a reliable representation of the financial value of a company should take this into account. Of course, any Accountant may refer to the general guidelines (which, themselves are certainly not free from a certain degree of Subjectivity) and, as long as permitted, make responsible adjustments. The point is that these adjustments would themselves lie on the personal assessments of the very Accountant, which is the final point we are raising. The activity of estimating the Depreciation of an Asset is not immune from personal assessments from the side of the Accountant responsible for the preparation of the financial statement of a company (and/or from the standard setters). This represents a conundrum and various regulatory agencies may allocate more or less discretion to the Accountant.

A further area where the Accountant is actually basing his/her decisions on a certain degree of personal assessment (Subjectivity) is the adjustment of Receivables (Baskin, 1992; Alfredson et al., 2012). Here a professional is expected to predict the amount of Receivables that will actually not be paid by the debtor. The very problem is relevant to all companies which send their goods/render services in advance, but it probably touches banks more than any other company. Banks lend money to other companies and to private individuals on a continuous basis, as part of their own main operating business. A part of their receivables will not be paid back by the debtors: companies actually sometimes bankrupt and private individuals occasionally default on their mortgage payments (as the experience of the financial crisis started in 2007-2008 has taught us). In order statements to respect the principle of Prudence, they must contain indication of the amount of receivables that the company expects not to receive in reality. This prediction is not easy to formulate. Again, also in this case, the problem is covered by international and national standards. For example, IFRS 9 covers the classification of Loan Receivables, and also IAS 39 is relevant. For example, “Loans and receivables for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, should be classified as available-for-sale” (IAS 39.9, http://www.iasplus.com/en/standards/ias/ias39). Banks holds reserve whose amount depends on past experiences. We could continue with the description/discussion of existing rules and standards,
nonetheless the point is that Accountants do not have a complete discretion regarding the recognition of Receivables and need to follow existing rules.

On the other side, each company has its own story and records. It is clear that there is a need of common guidelines and past experiences represent an important tool useful to predict future patterns. However, the future may be unpredictable, irrespective of the accuracy of the rules. Neither Standard-setters nor Accountants possess the magic crystal ball. Financial Statements can only offer an estimation (or an approximate insight) into the effective probability that debtors will honour their payments. This is not offering an objective representation of Reality.

The examples provided above are thought to demonstrate how the process of developing financial statements involve subjective assessments, from the side of standard-setters and/on Accountants, which challenge the popular belief according to which Financial Accounting is a Science based on objective assessment of numerically measurable facts. To avoid any misunderstanding: we are not postulating that the Subjectivity embedded in those decisions described above necessarily entails arbitrary decisions from the side of the Accountant (despite this being a possible corollary when the Accountant is acting with the intention to “massage” the numbers). Indeed, we are postulating that Objectivity is absolutely impossible in those decisions when the Accountant is asked to formulate forecasts regarding the actual diminution in value of an asset and the occurring/not occurring of a particular event. In those cases where Accountants have little room for judgement, then the rules themselves risk to become “sterotypical” and may fail to capture the Reality of a specific case. This said, professional and honest Accountants would do their best to come to a realistic and reliable evaluation using all their knowledge, experience and comparing their own ideas with the mainstream practices. Still their decisions may be far from being objectively unquestionable, and can easily be embedded in subjective decisions which can be formulated in good or bad faith, but which will always contain a certain amount of subjective assessment from the side of the expert in charge of making these very decisions. The very fact of considering past experiences as a benchmark for calculating Bad Receivable is in itself a (reasonable) subjective choice. A certain degree of Subjectivity appears unavoidable and cannot be denied invoking the possibility to rely on apparently objective indicators or guidelines devised to assist in the process. Besides being themselves grounded on other subjective assessments, these guidelines may eventually refer to historical evidence not necessarily perfectly representative of the value of the specific Asset of the company preparing its own financial statements.

A further aspect of Financial Accounting where the Subjectivity of the professional becomes relevant is the evaluation of the Fair Value of a specific Asset. Fair Value is defined as “The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date” (http://www.iasplus.com/en/standards/ifrs/ifrs13). Fair Value is a method used to evaluate various types of Assets, in particular Intangible ones as well as certain Financial Instruments. The literature distinguishes between Fair Value, Market Value, Replacement Value and Actual Value even if sometimes these terms are (unfortunately) used interchangeably (Chea, 2011; Nobes and Parker, 2010). The Fair Value of an Asset would in principle have to offer a realistic and unbiased estimation of the monetary value of that specific Asset at that particular moment of time. The Accountant should consider the market price of the same type or of equivalent or similar Assets and any characteristic that can eventually render that particular piece of Asset special so to carry a value which differs from the market price of similar assets. It is clear that the very operation is replete with difficulties: how do we classify Assets as similar? There are certainly international standards based on the substitutability between items but also the underlying criteria used to assess the level of substitutability may change across time (and measuring substitutability is per se problematic, see Wilsh and Bailey, 2015).

A practical concern: how to assess the Fair Value of a tangible asset (i.e. a book or even a tile) carrying the autograph of a prestigious personality? How to assess the Fair Value of Financial Instruments not listed in public markets and not even in restricted ones? These problems are well known to Accountants and are solved using professional diligence, existing standards (i.e. IFRS 13) and guidelines released by professional organisations. Nevertheless, any process of recognition of the
Fair Value of a specific Asset needs to take into account the particular characteristics of the very Asset and cannot be solved exclusively on the basis of objective criteria. There will normally (always?) be an element involving a subjective assessment from the side of the very Accountant.

We could continue with other examples (how to calculate Goodwill or how to account for the impairment of Goodwill) which would lead us to formulate similar conclusions. However, we trust that the message is sufficiently clear at this stage. We have demonstrated that Financial Accounting is not a Science based on Objectivity. There is often a certain space for subjective assessments from the side of the Accountant in charge of preparing the financial statements of a given company. Even the very Rules or Guidelines (i.e. IFRS) are themselves reflecting personal judgments from the side of standard-setters (Nobes and Parker, 2010). In many cases, even IFRS leave a certain degree of room for accountant’ evaluations and estimations. These estimations may still be done according to a certain ethic, when the Accountant refers to existing guidelines/standards and integrated them with his/her own personal evaluation of the specific case. On the other side, Subjectivity leaves room for arbitrary and voluntarily misleading decisions, as the recent story underpinning the (current?) financial and banking crisis has clearly demonstrated.

CONCLUSION

The main point raised several times is that there are accounting decisions which entail a certain degree of Subjectivity. This point has been repeated ad abundantiam across the paper. Moving from this, we expand the discussion and recall those paradigms postulating there are epistemological limits as for the capacity of the researcher to discover Reality. We may establish some similarities between the activity of the Researcher in the field of Social Sciences and the task of the Accountant who needs to come up with an estimation of the value of a specific Asset. Both activities encounter difficulties because discovering Reality as it stands is not straightforward. Furthermore, there is a further point, this time ontological, to meditate upon. We may start considering whether, besides being not discoverable, the real value of an Asset exists per se. Actually the monetary value of an item is not intrinsically embedded in the Asset itself. Indeed, it appears more as an element that entities external to the Asset, namely Humans, associate with it. As such, the monetary value of an Asset is intrinsically a social construction more than anything else. Hence, it is logical that different Accountants/standard setters may come to different estimations of the value of an Asset when going through processes like the ones described above. The very Financial Accounting, apart from mechanical recording activities of the value of payments made or received, is itself a Social phenomenon. If we understand it as such, then all the Subjectivity involved in the estimation of certain items and/or processes becomes a natural part of the game, because a large part of Financial Accounting needs more a Constructivist than a Positivistic approach.

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The subject of derivatives can cause a reader to turn glassy-eyed and irritated. Some people actually believe that because this market is out of sight (not covered by the financial media), it is insignificant. Nothing can be further from the truth. The market is arguably the most active in the world, with current combined notional value exceeding $550 trillion. This paper examines some of the uses and abuses of this market, and its contribution to the crisis of 2008. Recommendations prior to the crisis are looked at, and the current state of these instruments are looked at. Finally, the conclusions contain recommendations as to how derivatives might be brought more into the mainstream, and hopefully controlled better than they are today.

Keywords: Commodities, Currencies, Derivatives, Markets

1. INTRODUCTION

Derivatives are a complex series of financial instruments which seem to elude definition. Typically, we explain that a derivative is a financial instrument that derives its value, and therefore its tradability, from an underlying asset. In the main, there are four basic types of derivatives:

1. Forwards
2. Swaps
3. Options
4. Futures

(Durban, 2011, Loc 120–322)

There are, of course other types, particularly Mortgage-based derivatives, which will be discussed in further detail later in this paper, but we can restrict our focus for the moment on these. They are, on the whole, traded by three categories of user:

1. Hedgers
2. Speculators
3. Arbitrageurs

Again, these will be looked at later in the paper, especially speculators, but a few observations seem to be in order before we proceed.

First, these are not your grandfather’s solid investment. There are those who will say that derivatives reduce volatility for the user, but how is that possible overall? What derivatives do is to displace volatility from one user to another, and sometimes create further volatility in the transfer.

Second, the reason manipulation of markets cannot be stopped is because there is no single jurisdiction in which manipulators can be held answerable. The over-the-counter market, the largest segment where activity takes place, at end of 2015, was estimated at about 500 trillion dollars notionally (15 trillion gross at a moment when the market capitalization of the NYSE was 18.4 trillion) (nyxdata.com; BIS.org). By comparison, the GDP of the largest economy in the world, the US, is about 18 trillion annually.

Third, categorization of investors can sometimes make large pools of capital an easy mark for those wishing to score a major hit. By classifying a fund or a wealthy individual as a Qualified Institutional Buyer (QIB), the potential purchaser can sometimes be set up as an easy score. It opens
the way for player in the field to obtain easy access to otherwise questionable investments (Durban, 2011, Loc 210–245).

Fourth, these instruments sometimes are used in permutations and combinations by computer whiz-kids who are not interested in the ethical implications or economic impact to the counterparty. Stop and think for a moment about the use of futures in Japanese yen in Singapore by Nick Leeson of Barings. He lost, in a terrible moment following the earthquake in Kobe, 1.3 billion dollars. In fairness, he was trying to cover cumulative losses already incurred through use of derivatives, hoping that this one bet on the yen would get him out of trouble. Instead the London-based bank, which had been around since 1762, folded. (Durban, 2011, Loc 3036) This because of a bad trade by an experienced trader in Singapore. Then there is what Enron did with energy futures – traders shut down parts of the power grid, particularly in California to enhance the value of energy futures. It didn’t save the company in the end but did enhance creative accounting activities. Eventually a company dating back to the 1930’s was forced to close. This is outlined well in Partnoy’s paper on the subject (Partnoy, 2003)

Fifth, there appears to be no distinct code of ethics regarding the use of these instruments. While there are rules regarding payment through intermediaries, QIBs are permitted to use these instruments in any way they like. It is evident that there are additional uses, which will be demonstrated later in the paper.

Lastly, unlike most conventional investments where two parties undertake a transaction to accrue benefit to both parties, these items are zero-sum transactions. That means that for each instrument, there is a winner and a loser. With the sums of capital involved, this could result in displacement of significant amounts of capital. The effect is two-fold – not only is the amount of capital actually used affected, it can and frequently does affect trading patterns in the underlying assets.

The above, without even going any further, should make further discussion both dynamic and troubling. If we look at financial headlines and listen to financial news, discussion of activity in this market is virtually absent. It is very hard to get information on this market without access to expensive news services such Reuters or Bloomberg. Even at that, the information regarding activity is limited. Clearly, this device is a game-changer.

2. LITERATURE REVIEW

Opinions on financial derivatives have been changing with the financial situation from positive to more reserved. Stulz (2004) discussed the extent to which derivatives represent danger to firms and to the economy as a whole. He highlighted the difficulties firms face in valuing derivative portfolios. Furthermore derivatives can create systemic risks when a participant becomes excessively large relative to a particular derivative market. The author however concludes that overall, the benefits of derivatives outweigh the potential threats.

“For the economy as a whole, a collapse of a large derivatives user or dealer may create systemic risks. On balance, derivatives help make the economy more efficient.” (Stulz, 2004, p. 190)

Murphy (2008) published a study analysing the financial analysis of credit default swaps (CDS) and proposed that theoretical modelling was based on unrealistic assumptions, which led to serious problems in mispricing in unregulated market for credit default swaps that exploded following unrealistic rises in residential mortgages and gave momentum to the financial crisis.

Dickinson (2008) published his paper two months after Lehman Brothers went bankrupt, which effectively initiated the financial crisis. The paper concentrated on the impact on credit default swaps. The author claims that these instruments have created the potential for relatively few market participants to destabilize the entire economic system because they could hypothetically create systemic risk and aggravate the current financial crisis. The author also suggests the U.S. legislature could best regulate these instruments. The first measure would be increased capital reserve
requirements for large institutions. He also suggests confidential disclosure of CDS positions to FED by market players. In conclusion he suggests that:

“While the proposed legislative action would invariably impose costs on both market participants and society in general, the benefits of enhanced economic stability are incalculable.” (Dickinson, 2008, p. 28)

Skeel (2010) turns attention directly to financial sector and analyses consequences of the Dodd-Frank Act especially in regulating and analysing derivatives heavily used in the banking sector. The author claims that the DFA has two very clear objectives: limiting risk of the shadow banking system by more carefully regulating derivatives and large financial institutions and limiting damage caused by failure of financial institutions. As to derivatives, the author shows that derivatives regulation could prove beneficial: Dodd-Frank will impose order on this previously unregulated market by requiring that most derivatives be traded on an exchange and backstopped by a clearing house”. As to the dominant banks, they should have higher capital requirements and be more carefully scrutinized. The New Financial Deal with several simple bankruptcy reforms includes ways to address the international dimensions of the new financial order largely neglected by the Dodd-Frank Act.

Awdrey (2011) discusses the “intellectual origins” of the global financial crisis and claims they can be traced back to conventional financial theory, e.g. the perfect market assumptions, modern portfolio theory; the Modigliani and Miller capital structure irrelevancy principle; the capital asset pricing model and, the efficient market hypothesis. Automatic trading based on the above mentioned models contributes to the depth of the financial crises. The author discusses impact of derivatives and concludes that while the post-crisis regulatory regimes governing OTC derivatives markets in the U.S. and Europe address to some extent the regulatory challenges, they effectively disregard challenges generated by financial innovation.

The potential linkages between credit derivatives and the financial crisis are also addressed by Grobath (2011). The author claims that Lehman Brothers and AIG are often used as examples to answer the question on whether the distress of major financial institutions during the financial crisis can be related to credit derivatives. Credit derivatives and related instruments were seen as important hedging tools after the corporate crises in 2001 and 2002. By contrast, distress in financial markets during the subprime mortgage crisis was partly traced to these derivative instruments. In his paper the author aims to establish whether in these instruments are prevailing benefits or risks and suggests ways on how regulators should address OTC markets in the future.

3. WHAT DO WE KNOW ABOUT DERIVATIVES?

Derivatives are in the end financial transactions, implying a contractual agreement. They are done through intermediaries who guarantee possible execution. They are mostly bets on a future price movement or event (or not, depending on which side of the transaction you are on). Derivatives seem to have contributed to the 2008 crisis, an issue to be dealt with later.

According to the BIS, the most recent Over-the Counter (OTC) derivative situation looks like this:

<table>
<thead>
<tr>
<th></th>
<th>Notional amounts outstanding</th>
<th>Gross market value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H1 2014</td>
<td>H2 2014</td>
</tr>
<tr>
<td>Foreign exchange contracts</td>
<td>74,782</td>
<td>75,043</td>
</tr>
<tr>
<td>Interest rate contracts</td>
<td>563,290</td>
<td>505,431</td>
</tr>
<tr>
<td>Equity-linked contracts</td>
<td>7,084</td>
<td>6,968</td>
</tr>
<tr>
<td>Commodity contracts</td>
<td>2,206</td>
<td>1,869</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>19,462</td>
<td>16,399</td>
</tr>
<tr>
<td>Unallocated</td>
<td>24,815</td>
<td>22,541</td>
</tr>
<tr>
<td><strong>Gross credit exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All contracts</strong></td>
<td><strong>691,640</strong></td>
<td><strong>628,251</strong></td>
</tr>
</tbody>
</table>

Source: Bank of International Settlements
We should note that the largest part of the derivatives market is tied up in interest rate contracts (78%), which carry the lowest risk. These are typically swaps, which exchange cash flows from interest payments (e.g. floating vs fixed). However, the remaining 22% are not without risks, not just for the owners of those instruments, but also for those associated with the underlying securities. This will be discussed further later in the paper. There is an additional $64 trillion in exchange-traded derivatives. Due to better reporting standards in this market, we know that estimated annual turnover reported by the BIS in this smaller market is $1.3 quadrillion dollars. Banks are probably the biggest beneficiaries of this popular market. The following to tables from the Office of the Comptroller of Currency (OCC), part of the Department of the Treasury illustrate this.


Note that the “Big Five” banks – “too big to fail” – account for 94 percent of the outstanding balances. The next table, from the same source indicates the profitability of these activities to the banks.

The table shows holding companies (includes banking subsidiaries trading derivatives) made $11.8 billion in revenues in the first quarter of 2016, down about 37% from the same quarter in the previous year. Obviously, this is a rather lucrative activity. As intermediaries, banks, at least in theory, should not incur major losses from this activity, and can accrue significant benefits.
4. DERIVATIVES IN THE 2008 FINANCIAL CRISIS

A warning from Buffett at the shareholder’s meeting for Berkshire-Hathway in 2002 seems to have gone unheeded:

“I view derivatives as time bombs, both for the parties that deal in them and the economic system. ...The derivatives genie is now well out of the bottle, and these instruments will almost certainly multiply in variety and number until some event makes their toxicity clear. Central banks and governments have so far found no effective way to control, or even monitor, the risks posed by these contracts. In my view, derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal.”

This was coupled with warnings that debt levels were incomprehensible. Mortgage lenders were accepting questionable appraisals, and at the same time false income declarations in order to create an asset which could be used to securitize a second asset (Bonner, 2006, p. 220) – a derivative which would work, as we said previously, to benefit only one party. The purchaser does not enjoy the protections of consumer law because he is a Qualified Institutional Buyer. It is up to the purchaser to ensure adequate information is available to justify the purchase. This is how smaller funds in particular can be tricked into purchasing low-quality paper believing that risks were much less than they actually were.

The so-called Sub-Prime Crisis precipitated a world-wide recession, which lead the US government to undertake measures to bail out the troubled banks (same banks discussed above). The Department of the Treasury estimated exposure through the Troubled Asset Relief Program (TARP) (TREASURY, 2009) at $24 trillion, or about 150% of the annual GDP.

The creation and use of derivatives to escape exposure to debt had resulted in sale of assets being a central activity in lending circles, rather than paying attention to the credit-worthiness of the loans. An example of this is the dealings of Goldman Sachs through purchases of mortgages from various mortgage brokers, which would be in turn rated by a rating agency to determine risk. Ratings were clearly stated to be opinions and were not guaranteed. Goldman would put a paragraph in the prospectus which was at once lengthy and seemingly innocuous, thereby washing their hands of responsibility for the extent to which the ratings ultimately proved unreliable. (Cohan, 2011, p. 484) The derivatives, called Mortgage-backed Securities (MBS) or Collateralized Mortgage Obligations (CMO) proved a disaster for the purchasers, but made a fortune for the vendors. It was the use of private-label mortgage securitization that caused the practice to take off. This would ultimately make it the victim of its own success, culminating in a collapse in 2007 (Mian and Sufi, 2015, p. 97) Stiglitz points out that these instruments provided an opportunity to spread risk and obtain short-term returns, which is the orientation of most financial organizations. The biggest problem was information asymmetry. (Stiglitz, 2010, p. 14). In the end, derivatives were both ubiquitous and active in the factors that lead to the 2008 recession.

5. DERIVATIVES AND MARKETS

A key question regarding derivatives is about the influence they have on markets. First, does this influence exist, and what proof is there of it? The most heavily traded commodity in the world is oil, and coffee comes second. Oil is traded in many different forms – heating oil, Brent Crude, WTI, etc – on the world’s exchanges such as NYMEX, Dubai, and Tokyo. In 2009, it was estimated that about 85 million barrels a day were actually produced, but a billion barrels a day were traded on the futures market. (NYT, 2012). Oil is probably the most visible and closely watched commodity, so we will examine what happened to the price of oil over a period of several years.

The period in mid-2008 is most instructive. WTI is one of the most commonly quoted prices of crude is West Texas Intermediate. It is usually a bit lower than Brent, but the two shadow each other almost perfectly. First, the price of WTI reached a peak of $148 a barrel in July 2008, and collapsed to $30 a barrel by December of the same year. Here is a chart:
There were attempts to slow the collapse of oil prices, including a brave attempt by OPEC to cut production by 4.2 million barrels a day (NYT, 2008), but nothing could stop the collapse of the price of oil. Why did this happen? Further information from the Bank for International Settlements might help answer this question.

The Bank of International Settlement is the clearinghouse for these transactions, and only publishes its figures semi-annually. However, the figures reveal something about commodities transactions.

<table>
<thead>
<tr>
<th>Table 19: Amounts outstanding of over-the-counter (OTC) derivatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By risk category and instrument</strong></td>
</tr>
<tr>
<td><strong>In billions of US dollars</strong></td>
</tr>
<tr>
<td><strong>June 2007</strong></td>
</tr>
<tr>
<td><strong>Total contracts</strong></td>
</tr>
<tr>
<td><strong>Foreign exchange contracts</strong></td>
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<tr>
<td><strong>Forwards and forex swaps</strong></td>
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<tr>
<td><strong>Currency swaps</strong></td>
</tr>
<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td><strong>Interest rate contracts</strong></td>
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<tr>
<td><strong>Forward rate agreements</strong></td>
</tr>
<tr>
<td><strong>Forward rate swaps</strong></td>
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<tr>
<td><strong>Interest rate swaps</strong></td>
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<tr>
<td><strong>Equity-linked contracts</strong></td>
</tr>
<tr>
<td><strong>Forwards and swaps</strong></td>
</tr>
<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td><strong>Commodity contracts</strong></td>
</tr>
<tr>
<td><strong>Gold</strong></td>
</tr>
<tr>
<td><strong>Other commodities</strong></td>
</tr>
<tr>
<td><strong>Forwards and swaps</strong></td>
</tr>
<tr>
<td><strong>Options</strong></td>
</tr>
<tr>
<td><strong>Credit default swaps</strong></td>
</tr>
<tr>
<td><strong>Single-name instruments</strong></td>
</tr>
<tr>
<td><strong>Multi-name instruments</strong></td>
</tr>
</tbody>
</table>

Source: Bank for International Settlements
Note that in the category “Other commodities” was at $12.6 trillion in June 2008 and fell to $3.4 trillion by the end of December, by which time the price had collapsed by 80%. The decrease of 72% of commodities derivatives over almost exactly the same period is more than coincidental. Speculators had talked the price of oil up, and later were able to benefit by shorting the price as it fell.

The price of oil in normal times has a negative correlation to the dollar, but in last part of November and the month of December, a different pattern takes shape. This chart comparing oil prices to the value of the dollar shows this.

The media kept saying that supply was too high and demand was decreasing. Let’s begin by saying that a shift in supply and demand to cause an 80% collapse in price in a 5-month period is the stuff of a Tom Clancy novel. However, OPEC actually cut overall production in that period by 12% or 4.2 million barrels per day. The repeated claims of oversupply didn’t really make sense. (NYT, 2008).

The second thing to note on the chart is that in the latter half of November and the month of December, both prices and the dollar were heading downward. This is a pattern which is counterintuitive. If more oil can be purchased with a dollar, the currency is stronger and the price of oil weakens. The opposite is also true when a weaker dollar buys less oil. A similar loss of pattern occurred recently when, mysteriously, the dollar weakened with the price of oil. On November 24, 2014, Russian Finance Minister Anton Siluanov declared that if the world price of oil dropped below $60 per barrel, the Russian economy would go into a recession. This was in the midst of the Ukrainian crisis when sanctions were being imposed on Russia. (Telegraph, 2014) On December 12, the price of oil closed for the first time since 2009 below $60 at $57.80. As at the writing of this paragraph, it has not gone above since, and the sanctions in Russia remain in place.

This is not the only occasion when political inference has been suspected in markets through the use of derivatives. There have been several reports of a special unit called “Plunge Protection Team”, which, according to the Washington Post meets to discuss possible government intervention in different markets. This includes OTC derivatives, the most opaque of all markets. (WP, 1997)

What has become clear, and only occasionally makes the financial pages is that derivatives are being used to manipulate markets and have been used intermittently by differing interested parties over the years for different reasons. In June, 2006, a Senate Subcommittee in the US issued a report – “The Role of Market Speculation in rising oil and gas prices” with 5 major findings:
1. Speculation in the US energy market has increased by tens of billions of dollars over the past decade.
2. Speculation has contributed to rising U.S. energy prices, but insufficient market data is available.
3. Speculative dollars have altered the relationship between price and inventory, with the current oil market having both large inventories and high prices.
4. The Commodities and Futures Trade Commission must have better access to daily trading information to do its job.
5. Intercontinental Exchange (ICE) has an inherent price discovery function affecting U.S. energy prices.

Recommendations included closing the Enron loophole which limited the CFTC in its ability to oversee derivatives activity, closer international co-operation, and stricter policing of this activity. (Senate Report, 2006)

6. CONCLUSIONS

We have examined derivatives before, during, and after the crisis. Have any lessons been learned? First, derivatives markets must be more transparent. The Senate Subcommittee in 2006 made this recommendation – it has yet to be implemented.

Second, clearly a watchdog must be given oversight powers. This was also a proposal made at the same time. The watchdog would have to have real powers, and would have to have international reach. A model might be the ICC. To date, no action has been taken.

Third, if the other two are implemented, then limits could be reasonably set where at least public disclosure of control of corporations through derivatives such as options must be made public. Currently, for example, in the US, under Exchange Act Sections 13(d) and 13(g), Regulation 13D-G, 5% beneficial ownership of any equity class of a publicly traded corporation must be reported to the SEC for public disclosure (SEC, 2016). If options are taken on a significant bloc of securities, no public disclosure is necessary. The writer of this article recalls a situation personally when a trust company was “taken over” by 51% options. This was used to leverage access to pools of capital to which the trust had access. It was only made public, much later, when auditors exposed, in irregularities in the financial statements that the “purchasers” had done the same thing with six other financial institutions.

The financial press does pay enough attention to this market, probably for the reason that it is difficult to follow on an on-going basis. Most of the information on the OTC market, the largest by far, is several months old, and it is very sparse. In short, as far as use of derivatives goes, we have learnt little from the Crisis of 2008, much less done anything to stem the abuse that contributed to the recession.

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PLATFORM-BASED DIGITAL BUSINESS MODELS – BLESSING OR CURSE?

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Abstract
This article discusses some of the main ethical issues concerning platform based business models in corporations and the sharing economy. The list of open questions is almost daily getting longer, as technology is moving on, and awareness about the problems inherent with these platforms is rising. Multi-sided platforms will change the way we think about our lives, how work will be, how we buy and use goods and services, how corporations re-design their strategies, what shapes strategic decisions in general. Last but not least the question of government regulation needs to be answered, who is accountable for the transaction taking place on the platforms and in the end who will pay taxes for what.

Keywords: multi-sided platforms, sharing economy, strategic innovation

1. INTRODUCTION

The Sharing Economy or Gig Economy is actually not a new concept – markets are known since humans do business. What’s new is the technology driven fast expanding strategy of sharing on platforms. Sharing whatever comes to mind, information, products, services – global and local. Almost unperceived by the public, MNCs are entering the digital platform based markets. This means disruption in many areas and thus poses lots of ethical questions we don’t know the answers to yet. The development into the digital future also re-focuses M&A’s. This article outlines some of the main developments and suggestions for coping strategies.

2. PLATFORMS – CURRENT DRIVERS OF GROWTH

The MIT authors Evans and Schmalensee calls them “Matchmakers” (Evans, Schmalensee, 2016) which is a more accurate term for what we mainly know as “Sharing Economy”. And matchmaking is not new, it started when the first people installed local markets. Since then we know lots of analogue platforms offering sharing and/or business and non-business opportunities – just think of the “Mail-order Brides”. The newspapers in which interested parties could place classified acted as the platform bringing women and men together. Today this service is offered by numerous internet platforms. So the technology changed but the underlying business model stays the same.

Today’s matchmakers are successful on a much larger scale than in past centuries. While the innovation of printing unleashed a first unprecedented growth, print media platforms lost momentum in the last decades, when their customers moved online. Companies like Uber or AirBnB are rapidly growing and challenging established industries worldwide. And the trend has only just started. The website: http://www.web-strategist.com/blog/2013/02/24/the-master-list-of-the-collaborative-economy-rent-and-trade-everything/ lists an already quite extensive choice of platforms which offer almost anything to share, to rent, to give, local and global. The list is constantly growing. Investors hope for global expansion, and many platforms do just that surprisingly successful, while the marginal costs are extremely low compared to the established industry incumbents with their “pipeline” business models. Uber’s market capitalization is meanwhile $ 68 bn – and AirBnB is not far behind with $30 bn. On June 6, 2016 Reuters reports that Uber is potentially worth more than BMW, GM or ...
Honda. Uber, a seven year old company that up to now has never produced any profit thus enjoys a surprising attraction for investors. The platform based firms are called unicorns, start-ups which don’t offer an established success record but have a stock market valuation of more than $1 bn. The website CBInsights lists a real-time updates overview on current unicorns. Most of the firms on the list are American or Chinese, and the majority are offering products and services on-demand, social, big data or e-commerce.

Most of the sharing economy firms operate in B2C settings, and also the available literature is focusing on that structure. However, there is an emerging trend that industry incumbents are starting to invest heavily into transforming their traditional “pipeline” business models into platform based marketplaces. KPMG published a recent study “Now or Never – 2016 Global CEO Outlook” based on interviews with 1300 CEOs in global corporations based in the 10 largest economies. 41% of these business leaders expect significant transformations for their companies in 3 years time. 82% are concerned about their competitive edge in the near future. 65% are concerned that new entrants will enter their markets and disrupt their business. And when we consider the platform based firms, the process has already started. Matchmakers face challenges in really realizing the “match”, but the barriers to entry in established industries are much lower than in the past. Once a platform is successfully established the company also has access to an incredible amount of data. Sharing means also sharing personal data. And technology today offers the means to process big data in real-time. So it is not surprising that about 25% of the CEOs in the KPMG study consider “Fostering Innovation” and “Increasing Data Analysis Capabilities” as their main priority for the next 3 years. Another interesting strategic goal the business leaders consider as essential is the focus on “Collaborative Growth” - meaning building more external partnerships.

3. SUCCESS FACTORS

Multisided platforms like any shopping mall needs to facilitate communication and transaction between the different users of the platform. There are the supply parties as well as the consumer side which somehow need to come together. That is the most difficult part: establish the attraction of the platform that supply and demand side are equally enchanted and encouraged to use the platform. The main challenge is to create critical mass. Almost everything is traded – or shared – today on platforms, some are local and some act global. The core success factor is trust. The platform needs to make sure that whoever uses the site has good reasons to be sure that the site offers fair exchange, security for payments and interactions and transparency for members. Nobody wants to invite a potential serial killer or stalker as AirBnB or Couchsurfing guest in his home. And nobody wants to find the accommodation turn out completely different from what is promised on the site. So the platforms need to invest a lot in making their business model transparent and secure. Information is also a good which is shared in social media platforms, who up to now face an ongoing challenge to clear out hate, racism, terrorist communication and other undesirable comments which threaten members. Facebook claims that all their members are required to join only with their real names, which of course is a myth. So especially young people move on, as they don’t trust Facebook very much.

However, it is surprising how good platforms work in general. Considering the billions of daily platform users worldwide, there are only few misuses and crimes reported. Still, the platforms need to get better, especially the social media sites. Too often one may suspect that they don’t delete extremist groups or hate comment users just for keeping them online to make use of their data.

So what makes a platform successful in general? Businesses usually are developing one-way direction or pipe structured business models based on internally owned resources and labor. Platforms set out to create external ecosystems in a more and more networked world. That means that the value creation is shifting from a resource-based view where the control of resources is a major issue as a source for competitive advantage to the competency of facilitating networked relationships among two or more groups. A successful platform organizes the transactions between the different user groups and guarantees as much as possible the security of the transaction. “The notion of the
ecosystem as the new source of supply and value creation demonstrates an important shift in a networked world. Scale is no longer achieved purely through accumulation of labor and resources within a business or through non-scalable contractual relationships outside the business. Instead, *scale is achieved by leveraging interactions in the ecosystem.* (Choudary, 2015)

We are already in the middle of using almost on a day-to-day basis technology-based marketplaces, comfortably from home or on the move on our PCs and smart phones. In general people don’t think much about the technology background, they expect the transaction to be seamless and reliable and trustworthy. And that is what one of the main challenges is when creating new platforms: solving the chicken-egg-problem. Matchmakers need to find a way on how to make the platform equally compelling to suppliers and buyers. This takes time, and ever so often fails. Not enough suppliers results in no interest on the customer side and vice versa. “Multisided platforms face this coordination problem because the fundamental product they are selling is providing one group of customers convenient access to one or more other groups of customers. There is no product for one group if the others don’t show up.” (Evans, Schmalensee, 2016)

The next challenge is the coordination problem. “They don’t just need some customers from all sides to show up. They need enough to show up for it to matter” (ibid). So achieving critical mass is paramount. Evans and Schmalensee and other authors outline several strategies to achieve the goal of critical mass. Platform unicorns like Uber, AirBnB, Alibaba, Etsy, Youtube, Facebook, WhatsApp and many others have demonstrated how to do it. Some of these companies managed to amass huge amounts of venture capital, even though the companies are not profitable.

The incumbents are well known and almost daily are news in the global media. We come back to that. But let’s have a look at what MNCs are meanwhile planning. Platforms are entering the corporate world. SAP for example has started to migrate its more than 300000 customers worldwide to its new platform based technology HANA, which enables companies to process big data in real-time. SAP states in its 2015 Annual Report: “SAP customers no longer compete in a business-to-business economy. It’s now a consumer-to-business economy that is generating unprecedented quantities of structured and unstructured information. In this era, individual consumers expect businesses to deliver relevant, personalized experiences to them – wherever they are, whenever they want. Businesses that rise to this expectation will win. Those that can’t, or choose not to, will lose.” (SAP, 2015) A main ingredient of many corporate reports is the shift towards “the fast-changing digital economy”. The title of the Annual Report 2015 of GE is: Digital Industrial (GE, 2015) which indicates the direction the company is planning to take. “At GE, we have decided to generate and model this data ourselves – both inside the Company and with our customers. This is what we mean by becoming a Digital Industrial. Our Digital Industrial capabilities will expand our growth rate, improve our margins and bring us closer to our customers. … The “killer app” for the Industrial Internet is GE’s Digital Twin. GE is creating living digital profiles of 500,000+ industrial machines in the field to provide new opportunities for customer growth and productivity. The Digital Twin is a software model of a physical asset or process that will make it possible to manage more precisely than we ever thought possible and deliver better outcomes. The Twin will create new business models and services for GE’s customers and our businesses.” (ibid.)

Car companies like Daimler or BMW are in the middle of creating their own car sharing businesses, also run on platforms. We may assume that these companies like other global corporations are SAP customers, making use of the innovative technology. SAP acquired the B2B platform Ariba, a real-time supply chain platform. It is easy to understand that platforms which bring together vast networks of partners and businesses need to be even more trustworthy than B2C relationships.

Internet of Things (IoT) is a new trend which will be largely adapted by all sorts of companies who interact with consumers. Washing machines or fridges will be integrated in home networks and start a life of its own. Amazon just introduced their Dash-buttons to the UK and Germany, which enable consumers to replace or replenish goods just by clicking. It’s still not the fridge who orders without further control, but almost so. There will be - at least for the time being - a control email to check that the order is okay. And as we see in the GE Annual Report also investment goods will be parts of networks and the data will be monitored in real-time.
4. BRAVE NEW WORLD? ETHICAL CONSIDERATIONS

As usual technological development is much quicker than the users evaluating the actual pros and cons.

Francis Fukuyama writes: “It is fashionable to shy away from value judgments when comparing different cultures, but from an economic standpoint, some ethical habits clearly constitute virtues while others are vices. Among the cultural habits that constitute virtues, not all contribute to the formation of social capital. Some can be exercised by individuals acting alone, while others – in particular, reciprocal trust – emerge only in a social context. The social virtues, including honesty, reliability, cooperativeness, and a sense of duty to others, are critical for incubating the individual ones, however, and have received considerably less attention in discussions of this subject.” (Fukuyama, 1995) One of the main prerequisites for a successful platform is trust. This involves quite a lot of different issues - security of the transaction, data protection, payment security etc. Credit Cards are also platforms, and without customer trust the system would collapse. The new platforms, however, operate on a much larger scale. People invite complete strangers to their homes (AirBnB), step into cars with complete strangers (Uber) or spend the night at places of people they have never met before (Couchsurfing). Not all platforms are actual trading platforms based on payment models, there are also sharing platforms which are based on a general idea of giving gifts. Still it is always a risk involved, but people in general seem to be willing to take it.

Let’s have a look at some of the main issues.

Ecosystems will change the way we work, think about property, products and services. It will be more important to bring together suppliers and users than actually purchase goods - we just want the use of them. Services are already offered on platforms on a large scale. A more alarming trend is the fragmentation of work - the emerging workforce of what is called “the digital nomads”. There are a lot of ethical issues we are facing and in the following I summarize some of the most predominant.

5. BIG DATA, ANALYTICS, ALGORITHMS

That business models “free” are not free as such is meanwhile almost general knowledge. Especially social media networks but also trading platforms are compulsive collectors of all sorts of data. Retailers like Walmart or Tesco have kept and analyzed their customer data since quite a long time – buyer data, like credit cards, buying preferences, addresses and more. Direct marketing tried to contact these customers based on their known preferences. Now however, the platforms collect and process data on an incredibly large scale. Companies like Amazon try to combine customer relationships with social media networks. Google or Facebook “personalize” advertising on the private preferences of their users. And as a side business they collect all the data on the devices of their users and sell them happily to information brokers who sell these data for example to large corporations. Many applicants for jobs are very surprised when the HR interviewer all of a sudden asks them about something they have posted to their private Facebook site but never make publicly available. No need anymore to do it on your own, Facebook takes care of that. Facebook just announced that it will store the telephone numbers and contacts of WhatsApp users to use it supposedly to improve their personalized services but also to improve technical support. A more than questionable announcement. Social media networks are in constant conflict with data protection laws especially in the EU, but politics and legal intervention is slow in enforcing real change.

Big data are also an issue in corporate applications. What does a company in the end know about its employees, its customers and partners and what should it be allowed to know? Is privacy possible at all, or are we moving to the brave new world in which everybody’s life is transparent like an open book? Real-time analytics of big data is definitely a huge advantage for today’s fast moving businesses, but limits should be introduced about how far it is allowed to go.
The main concern about Big Data analytics is though the wide use of completely intransparent algorithms, which more and more influence our lives. Algorithms are created by human beings, and so they are as biased as human beings are. Furthermore and more dangerous, algorithms are developed by organizations with quite specific objectives in mind. And it is not at all in the interest say for an insurance company or a bank to reveal the objectives of such algorithms. (O’Neil, 2016)

6. SOCIAL CONTRACTS AND HOW WORK WILL CHANGE

One of the most serious and dangerous issues is the impact platform business models will have and already have on the way we work. Especially in Silicon Valley big money and much lobbying is invested to create a world which more or less eliminates the social contracts the workers at least in the Western World have fought for and relied on since about 150 years. Platforms like Uber only want to collaborate with independent contractors, same is true for other platforms which offer jobs – very often very low paid micro jobs like offered by Amazon. Projects are fragmented into small steps, and these so called “digital nomads” earn some money by click-jobs.

Again this is not only bad. For people at the bottom of the pyramid, those who have an annual income of not much more than $2000 p.a. this is a good way to make some extra money. The negative impact though can be seen in the developed world. In the US it is estimated that meanwhile more than 25% of the workforce are “free agents”. This trend is also starting in the EU. Also in Europe is the number of freelancers constantly rising:
Furthermore there is an ongoing trend to employ people more and more on temporary contracts. This is not only the case for unskilled labor but also for people with degrees. The data of the EFIP concerning the average freelance salary is extremely misleading, because while some free agents do make a lot of money most freelancers have difficulties to get by, don’t have any health insurance or pension plans. The way they work makes it extremely difficult especially for young people to plan ahead. That not everybody is a born adventurer or top class technology expert who can demand and get high hourly rates is made clear in a brand new study the consulting company Ernst & Young has done among students in Germany. It turns out the the employer of choice for most students in 2016 is Public Administration and the main interest in a job is Work-Life Balance! (EY, 2016) This is a clear indicator that the enthusiasm about working freelance which is much promoted by Silicon Valley and authors who themselves have full-time jobs in unlimited contracts is very misleading.
Another problem which is currently emerging is that platforms at least to a certain extent can’t be profitable as long as people are involved. Uber just published that it had made 1.27 bn $ losses up to now. And the firm also said that the main problem is that they have to top up their drivers payments in some countries. In many countries Uber drivers are on the warpath, they claim that they are in fact full-time employees and they demand full-time employment - and also at least the legal minimum wages. Uber states that it will probably only be profitable once the driverless cars are introduced everywhere. It is interesting that in this context the discussion about an unconditional basic income starts again. The car manufacturers as well as Silicon Valley firms like Google work on the prospect to make human service in many areas obsolete.

Technology firms and platform providers are laying social minefields, because they want to abolish the social contracts people depended on since more that a century. The problem is a rising inequality in our societies and a rising anger at the cut-off part of the population. The elimination of a well situated middle class leads to rising anger and already finds outlets in extremist and/or nationalist political opinions.

7. INTERNET OF THINGS

These days in Berlin takes place the IFA2016 – the international consumer electronics unlimited fair. It’s a marketplace for IoT technologies to come. All sorts of household devices will be able to link into home networks and managed by smart phones. Also the car industry is developing platform based communication between cars in traffic. Daimler just announced the car-to-car-communication for its new E-class. The platform is meant to warn other cars about immediate dangers like ice or any other situation in which the security system of the car balances and corrects a dangerous event.

The problem in all these networked solutions is that the security standard is mostly very poor, and especially household equipment can offer an open gate to any hacker into the home network. It is easy to imagine what that could mean for cars.

8. CHANGING M&A STRATEGIES

The trend to acquisitions is ongoing, and usually we get press releases like the one about the recent planned merger between the beer corporations AB InBev and SAB Miller, which announced the elimination of about 5500 jobs owed to redundancies. Amazon though is as a platform company also constantly on shopping tour. But in this case, the technology might be merged, but the companies are run as before as part of the big Amazon-empire. To get a better competitive stance against Amazon, Walmart just announced the acquisition of the start-up shopping platform jet.com, a fast-growing e-commerce company, which Walmart plans to run independently from its core business. Thus post-merger integration will also change and will mainly involve technology and sharing data.

9. LEGAL QUESTIONS

The discussion about legal aspects of platforms has only just started. Governments in many areas seem to be more or less clueless how to tackle the problem. Who is legally responsible for what happens on a platform? In former times the question was solved quite straightforward, but on todays online marketplaces people from all over the globe take part in interactions and post information. Is Facebook responsible for hate posts as for example the German minister of justice tries to establish – without much success? If people on eBay sell weapons, who is legally liable? One of the most urgent open questions is the question if an algorithm is allowed to decide in a critical situation in a driverless car who to kill and who to save. In the recent Tesla accident killing at least only the driver it is not clear if the driver or Tesla is legally responsible.
10. GOVERNMENT, REGULATION, TAXES

Last but not least is the question about regulating these markets. Again it is about legal frameworks, but also how to tax platform based businesses. The authors of currently available books on the sharing economy mostly plead for self regulation. This has two main reasons: First, pragmatism: it is almost impossible to control from a national government point of view what is actually going on on these platforms. The second argument is based on the creation of trust. As the platforms as m.a. need to attract a critical mass of players, trust is one of the most important ingredients. Companies like Alibaba, the Chinese online market-place have set up extensive security checks to make the transactions as secure as possible. So the argument is basically that the platforms invest in security out of self-interest. However this doesn’t solve the problem of taxes.

Another problem governments need to deal with is the impact platforms may have on community development. AirBnB for example is in many cities extremely controversial, as the rising number of tourism rentals threaten to drive even long-term tenants out of the city centers into obscure suburbs and thus destroying the balance in inner-city districts. Cities like Berlin introduce new laws to regulate this development, but the results are questionable. Landlords find the loopholes and use them. In the last 4 years there was a rise of furnished apartments in Munich or Stuttgart from about 30% to 60%. These flats are usually let short-term and thus avoid any regulations.

11. CONCLUSION

This article only outlines some of the ethical issues concerning the sharing economy. It also only covers the legal marketplaces and not the dark net. In general consumers, governments and also the platform providers need to cooperate to find a way on how to balance the legitimate requirements of users, communities and governments. Solving these problems is paramount, as the dissolution of social contracts, gentrification and tax avoidance create a climate of extremism. Many online activists support a sort of anarchism, but outmaneuvering democratic elected governments, also on financial levels – local and national – means to prevent them from doing their jobs.

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SOCIAL AUDIT IN ESTONIA: PRESENT SITUATION AND TRENDS OF FUTURE DEVELOPMENT

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Abstract

Latest developments in the Corporate Social Responsibility (CSR) area have made non-financial reporting a matter of high importance. As a result the demand for the social audit is a growing trend in Europe; leading auditing companies started to offer services of social audit. The aim of the present research is to find out whether there is growing popularity of social audit in Estonia, demand from the clients’ side and consequently if this service is offered by the auditors. The authors have made a survey among the auditors currently offering their services on Estonian market and companies listed on the Nasdaq OMX Baltic (Tallinn market) in order to find out their opinion on the current situation and future development of social audit in Estonia.

The results have shown that today there is no growing interest towards the social audit in Estonia. However the authors strongly believe that globalisation and worldwide implementation of the CSR reporting will generate rapid changes in this field. The authors are aware that the study has several limitations: the sample of the auditors should include more respondents and in future it would be useful to include the opinion of other groups of stakeholders into the research.

Keywords: auditor, Corporate Social Responsibility, listed companies, social audit

1. INTRODUCTION AND LITERATURE REVIEW

Latest developments in the Corporate Social Responsibility (CSR) area have made non-financial reporting a matter of high importance. Owen (2003) identified the end of the 20th century as the time of “remarkable growth” in the area of social and environmental information reported by the European companies. In the First Analysis Paper prepared by the Global Reporting Organization (GRI) in May 2015 among the main further trends of the CSR reporting were there were outlined that “companies would be held accountable more than ever before, business decision makers will take sustainability issues into account more profoundly especially than making vital decisions regarding the performance of the company and that reports would result both from regulated and voluntary process” (Sustainability..., 2015). In Corporate Responsibility Report of the year 2015 KPMG also outlined the growing trend of CSR reporting with the most activity notices in Asia Pacific Region with the highest CR reporting rate in India, Indonesia, Malaysia and South Africa. However, it was also noted that the practice of including CSR related disclosures into the annual financial report became “a firmly established trend”, while the number of companies claiming to produce integrated reports remains quite low. (Currents..., 2015) It is obvious that all over the world more and more companies today are preparing reports on social and environmental performance in order to increase sustainability, transparency and trust among their stakeholders. The KPMG Survey also identified that it has become a worldwide common practice among world’s biggest companies to provide third party independent assurance of CSR information (Currents..., 2015). According to Ernst and Young sustainability reporting is now becoming “a mainstream business practice” (Ernst&Young, 2013). Growing number of companies are starting to prepare CSR reports on a voluntary basis, in many countries there appear official guidance and regulations on the CSR reporting and the stipulated requirements go beyond the common public understanding of CSR-related disclosures (Sulkowski and Waddock, 2014).

The demand for the social audit is illustrated by Figure 1.
Leading auditing companies started to offer social audit services in line with the requirements of the customers (see Figure 2).

It should be noted that unlike financial audit which is focused on the verification of the financial information social audit does not only measures and evaluated the social performance of an organisation but also helps to better understand and improve the process itself and to capture the differences. (Social Audit Network, The Social Audit, 2016.) The vital part of the social audit is a close cooperation with stakeholders and matching the social and environmental goals set by the company, which is also outlined by Osipova (2009), who analysed the relationship of social audit and social partnership and concluded that social audit may be used by the companies as a vital tool of
enabling dialogue with stakeholders and cooperation between business communities, public community and the state.

Social audit phenomena has attracted the researcher’s attention since the last century, the possible developments and trends of social audit has been investigated and identified in the works of Cotton et al. (2000), Courville (2003), and Ahmed (2013). The importance of social audit results is confirmed by numerous studies. According to Brown-Liburd and Zamora (2014) CSR assurance plays an important role in making investment-related decision and investors treat the CSR assurance as a “disclosure credibility signal”, which is also confirmed by studies of Chen et al. (2015) stating that CSR reporting gives a vital information to investors however it lacks credibility. This fact brings upfront the public demand for social audit. The results of the research of Simnett et al. (2009) on assurance of sustainability reports in the international context confirmed that companies willing to enhance the credibility of their reports would require the assurance, however the choice of the professional auditor will present in more “stakeholder orientated countries” (Simnett et al., 2009). These findings go in line with the financial audit features which include the “factor of culture” affecting the auditing and accounting perspectives (Cowperthwaite, 2010). In authors opinion the diversified understanding of social audit also created well-known as “audit expectation gap”, often described as a conflict of interest with auditors derived by the different understanding of the process in general and its outcomes in particular, similar to the one affecting the financial audit (Li Lin and Chen, 2004 and Turnbull, 1995).

There are numerous toolkits issued in different countries enabling companies to better understand and perform social audit, however, still there is no unanimous agreement on the measurement (Morimoto et al., 2004), and the type of audit – whether it should be performed by internal or external auditor. According to Björkman and Wong (2013) the independent auditor would perform audit of a higher quality, however in turn that would affect the audit fees. Several weaknesses and areas of further development in the field of social audit were also identified by Gray (2000). In his research he clearly stated that terminology of social and environmental audits should be clarified, attestation practices should be strengthened and the accounting education and training needs to be re-thinked (Gray, 2000).

All the above mentioned created a challenging path for the further research and inspired authors to investigate what is currently happening in Estonia, has social audit “arrived” and “settled” or just “put on hold” by both auditors and companies.

2. RESEARCH DESIGN AND RESULTS

The stated developments have in influenced the present research. The aim of this research is to find out whether there is growing popularity of social audit in Estonia, demand from the clients’ side and consequently if this service is offered by the auditors.

The authors have made a survey among the auditors currently offering their services on Estonian market in order to find out their opinion on the current situation and future development of social audit in Estonia. The questionnaire was sent to 140 auditors currently offering services in Estonia in the period of 07.11.2015 – 07.12.2015 and 34 replies were collected; the sample consisted of 82% partners of the auditing companies and 18% audit managers.

The authors also considered important to conduct a survey among the companies listed on the Nasdaq OMX Baltic (Tallinn market). Most of these companies either prepare standalone CSR reports or include CSR related information into their annual financial report therefore they might be interested in purchasing services of social audit. The survey was conducted in November –December 2015 and at that time 16 companies were listed on the Nasdaq OMX Baltic (Tallinn market). The questionnaire was sent via email to all listed companies and five replies were received.

Both questionnaires consisted of several questions regarding the CSR and Social Audit. Questionnaires were divided into several part: one part compulsory for all respondents and two other
separate parts for those who offer/purchase and those who does not offer/does not purchase services of social audit.

Table 1 represents respondents’ awareness about Social Responsibility in general.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Auditors (%)</th>
<th>Companies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not aware</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Generally aware</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>Very aware and understand the meaning of “social audit”</td>
<td>47</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: Authors

Table 1 clearly demonstrates that listed companies are in line with the latest developments and social responsibility is familiar to all companies while a small percentage of auditors are not aware of this phenomena.

Table 2 represents respondents’ awareness about Social Audit.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Auditors</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not aware</td>
<td>17 (50%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Generally aware</td>
<td>12 (35%)</td>
<td>1 (20%)</td>
</tr>
<tr>
<td>Very aware and understand the meaning of “social audit”</td>
<td>5 (15%)</td>
<td>1 (20%)</td>
</tr>
</tbody>
</table>

Source: Authors

It should be stated that low awareness is demonstrated by both group of respondents in regard to social audit. Only small percentage (15% and 20%) consider themselves well aware of social audit. However, in authors opinion that may be affected by the personality factor and represents the awareness of the concrete person responding to the questionnaire and does not show the level of the general awareness of the company.

In the table 3 are presented responses to the question “what statements are associated with the social audit”.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Auditors (%)</th>
<th>Companies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational legitimacy</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Process of measurement and reporting</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Social partners</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Improvement of the performance of the company</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Authors

Table 3 clearly demonstrates that companies understand social audit as a process of measurement and reporting involving stakeholders and social partners, which helps to improve the performance of the company.

Reasons of performing or purchasing of services of social audit are presented in the table 4.
Table 4. Reasons to perform/purchase services of social audit

<table>
<thead>
<tr>
<th>Statement</th>
<th>Auditors (%)</th>
<th>Companies (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement of loyalty and good relations with stakeholders</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Improvement of decision-making process</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Consider future risks while preparing strategic plans</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Analysis of the existing relationship with stakeholders</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Increase of the transparency of the company for major stakeholders</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Control over fulfilment of stated social values and goals</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Evaluation of the influence of activity of the company on various groups of stakeholders</td>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Authors

Table 4 clearly demonstrates that among the most important reasons both groups identified the control over fulfilment of stated social values and goals and evaluation of the influence of activity of the company on various groups of stakeholders. While results summed up in the table 5 show that still there is a low demand for the social audit service from the companies’ side.

Table 5. Reasons of non-providing services of social audit (respondents were allowed to choose several options)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Amount of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of demand from the clients side</td>
<td>25</td>
</tr>
<tr>
<td>Lack of time + lack of clients + lack of professionals</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Authors

Authors were also interested in respondents’ opinion on the future of social audit in Estonia. Results presented in table 6 clearly demonstrated that only a small group of auditors (15%) believes that social audit will develop in Estonia and none of respondents was interested in offering such services in future. In regard to companies only 20% showed an interest in purchasing services of social audit in future and 60% of respondents consider it possible.

Table 6. Auditors opinion on the future development of social audit in Estonia

<table>
<thead>
<tr>
<th>Statement</th>
<th>No</th>
<th>Yes</th>
<th>Maybe</th>
</tr>
</thead>
<tbody>
<tr>
<td>In future social audit will develop in Estonia</td>
<td>20%</td>
<td>15%</td>
<td>65%</td>
</tr>
<tr>
<td>You are interested in offering services of social audit in future</td>
<td>44%</td>
<td>0%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Source: Authors

It is worth mentioning that only one respondent is currently offering services of social audit for the period less than 5 years and the demand was initiated by the client. It should also be noted that so far none of companies have purchased services of social audit from auditing companies. The main reason was the lack of demand, however two companies noted that in future social audit may become one of the issues in the company’s priority list.

3. DISCUSSION AND CONCLUSIONS

The results have shown that most of the respondents are aware of the CSR phenomena; however, the awareness of social audit is quite low. Currently auditors in Estonia do not offer services of social audit due to three main reasons: demand from clients, lack of time and lack of qualified personnel.
Among the most important reasons of performing social audit the respondents named the evaluation of the impact of everyday activity of the organization on different groups of stakeholders, keep a close control over the fulfilment of stated mission, vision and main values of the organization and to increase the transparency of organization in general. Companies understand social audit as a process of measurement and reporting involving stakeholders and social partners, which helps to improve the performance of the company.

The results also indicated that only 15% of the respondents clearly stated that there are perspectives of future development of social audit in Estonia. Therefore, it should be stated that at the present time there is no growing interest towards the social audit neither from the client nor from the auditing company. Most companies also noted that the variety of offered services totally depends on the client desire and requirements. So, it may be concluded, that in case the growing popularity of social reporting and audit in the modern business world generates higher demand from clients; majority of auditing companies in Estonia will start offering social audit services.

However, the authors strongly believe that globalisation and worldwide implementation of the CSR reporting will generate rapid changes in this field. The authors are well aware that the study has several limitations: the sample of the auditors is very small, should include more respondents and the sample of surveyed companies should also be increased. But as this is just a first step, author consider these results indicative and useful. For the future research, authors expect to broaden the scope and include the opinion of other groups of stakeholders into the research.

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NASDAQ OMX Tallinn market website.


Further topics
INFLUENCE OF SOLVENCY II ON VALUING PROCESS OF TECHNICAL RESERVES AND ITS DISCLOSURE IN THE FINANCIAL STATEMENTS ACCORDING TO IAS/IFRS

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Abstract
Insurance companies represent a special kind of financial subjects. Their daily risk challenges which go along with the insurance business cause their different approach to the risk that another business subjects might have. Thanks to risk insurance companies gain maximization of market value. Insurance companies as public interest entities are obliged to present their financial statements according to IFRS. A new regulation Solvency II is considered an important step in the history of the European insurance market. It brings changes in the view on the valuing process of assets and liabilities. This change naturally has to be transposed into the disclosure process and be visible in the financial statements. Technical reserves are kind of safety guaranty of a company’s liabilities fulfilment which comes for signed contracts. A signed insurance contract means a long term commitment of an insurance company where its fulfilment value and time is not certain not only for the company but also from a policyholder side. The European Insurance and Occupational Pensions Authority – EIOPA and International Accounting Standards Board try to harmonize the requirements of a valuing process of an insurance company’s assets and liabilities. The goal of this harmonization is to ensure the consistency of required data presentation in financial statements prepared on the basis of the IFRS. The aim of the paper is to high-light and analyse the technical reserves relevance and the impact of a different reserves valuation on Slovakian insurance houses in the next future.

Keywords: insurance, valuation of assets and liabilities, technical reserves, Solvency II, IFRS

1. INTRODUCTION

Insurance companies are institutions whose main purpose is to provide insurance to business entities and to general public. They promise to insure against the possible negative future events which might cause material and financial losses to policyholders. Another aspect of insurance is that it should secure and stabilize economic and living standards of insured entities. The problem of insurance companies they face nowadays is to truly secure the guaranty they promised by signing insurance contracts where the exact volume and time of its fulfilment was not certain in the time of a contract conclusion. This problem might not be seen as too serious but the fact that insurance is perceived as a long term commitment where its fulfilment could appear in the close time or later from the signing contract date should be taken into consideration. Whereupon this fact the insurance companies are constantly obliged to record awaited future development, to identify and also to eliminate risks which might disrupt their ability to fulfil their future liabilities. Insurance undertakings shall have in place an effective risk-management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks at an individual and at an aggregated level, which they are or could be exposed to, and their

interdependencies. Risk management system shall be effective and well integrated into the organisational structure as well as in decision-making processes of an insurance company. It shall cover the risks to be included in to the calculation of the Solvency Capital Requirement together with risks which are not or not fully include in this calculation. The risk-management system shall cover at least the following areas:

a) underwriting and reserving;

b) asset–liability management;

c) investment, in particular derivatives and similar commitments;

d) liquidity and concentration risk management;

e) operational risk management;

f) reinsurance and other risk-mitigation techniques.

Risk-management system of an insurance company includes risk and solvency assessment. This includes all solvency requirement, authorized risk range limits and business strategy. It shall also comply with the capital and technical reserves requirements.

In order to secure a sustainable business and also to resist all possible future threats insurance companies create so called technical reserves whose creation process must be based on respective legislation. IAS 37 Provisions, Contingent Liabilities and Contingent Assets outline an accounting for reserves (resp. provisions) as contingent liabilities and assets of uncertain timing or amount which could be reported in the accounting only when certain conditions are fulfilled:

- a present obligation (legal or constructive) has arisen as a result of a past event (the obligating event),
- payment is probable (”more likely than not”),
- the amount can be estimated reliably.

Technical reserve is in the insurance business understood as a reserve, resp. provision which is created in order to cover future liabilities of an insurance company. This term is used in Act No 39/2015 Coll. On insurance (further as “Coll. On insurance”) and also in other Slovak legislation given by National Bank of Slovakia. But the term ‘technical reserves’ is not so important from the IFRS perspective.

Figure 1. Technical reserve identification as a commitment of an insurance company


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3 DIRECTIVE 2009/138/EC, article 44, 1.-2.


5 In some of financial statements of insurance companies based on IFRS this term is not used at all.
Technical reserves are the basic of the economic prosperity of an each insurance company. They are created in the form of funds with the aim to secure company’s solvency, so to fulfil its liabilities which comes for signed contracts in a certain time and volume. Technical reserves give insurance company kind of security that is needed to fulfil its promised commitments in case of an unexpected or extraordinary turbulence on the insurance market. That means that an insurance company shall be thanks to technical reserves always able to cover its future liabilities, even in the unknown future economic conditions.⁶

According to Coll. On insurance shall be technical reserves created on the following purposes:

- technical reserve for unearned premium,
- technical reserve for claims payment,
- technical reserve insurance for bonuses and discounts,
- technical reserve for life insurance,
- technical reserve for the risk cover derived from financial investments made on behalf of insured,
- other technical reserve.⁷

2. VALUATION OF TECHNICAL RESERVES ACCORDING TO SOLVENCY II

New regulation Solvency II brought new fundamental changes to the process of assets and liabilities valuation. The regulation is based on market value principle⁵. This means that the valuation must be done according to the actual market value⁹. The Solvency I, the predecessor of the Solvency II, required so called prudential value of assets and liabilities. This approach was focused on the best estimate and should have included reasonable margin for the negative deviation assumption of a valuation itself.

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⁷ Coll. On insurance, § 171, 1.
⁸ The fourth quantitative impact study of Solvency II – QIS4, has for market value used a term “economic value”. Its definition is identical with the definition of the real value given by IFRS.
¹⁰ DIRECTIVE 2009/138/EC, article 75, 1.
that IFRS is being used in interconnection with Solvency II since the mentioned definition comes from the characteristic of a real value given by IFRS.

Slovak insurance companies did not have problems with overestimation of assets and liabilities of their accounting values to the so called “economic value” which came together with new regulation Solvency II. This testing was done by the forth quantitative impact study (QIS 4)\textsuperscript{11}. The main argument was that the IFRS requirements were implemented by insurance companies before the establishment of the Solvency II and its claims.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Percentage changes from the insurance companies revaluation process of their asset on their economic value, according to the requirements of Solvency II}
\end{figure}

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\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Percentage changes from the insurance companies revaluation process of their asset on their economic value, according to the requirements of Solvency II}
\end{figure}


\textsuperscript{11} As part of the Solvency II project, the Commission has requested CEIOPS to run a number of large scale field-testing exercises also called Quantitative Impact Studies (QIS). These were done to assess the practicability, the implications and possible impact of the different considered alternatives. QIS 4 took place from April till July 2008 and was attended by 1 412 insurance companies from 30 EEA member countries. One of the main objectives of QIS4 was to collect detailed information on the impact of the testing proposals on the balance sheet of the insurance industry. This was done in order to help develop Level 2 implementing measures in line with the Level 1 Framework Directive Proposal. (CEIOPS’ Report on QIS 4, 2008).
Real valuation of liabilities, mainly technical reserves, is more difficult than any other insurance company’s liabilities. The main reason is that there is not any estimate for a technical reserve’s market value. The valuation process is executed according to the present value of the insurance liabilities transferred on behalf of other insurance company which the insurance company would be willing to pay for. It should be the best estimate. “The best estimate shall correspond to the probability weighted average of future cash-flows, taking account of the time value of money (expected present value of future cash-flows), using the relevant risk-free interest rate term structure.12” Beside the best estimate, the technical reserves value consists of risk margin. Its value shall insure that the technical reserves amount will be equal to the amount needed in order to meet the obligations of the companies.

Figure 4. Percentage changes of the revaluation process of liabilities on their economic value according to the requirements of Solvency II

Figure 5. Market value of technical reserves
Source: based on DIRECTIVE 2009/138/EC.

12 DIRECTIVE 2009/138/EC, article 77, 2.
Other elements which need to be taken into account in the calculation of technical reserves are:

- all expenses that will be incurred in servicing insurance and reinsurance obligations;
- inflation, including expenses and claims inflation;
- all payments to policy holders and beneficiaries, including future discretionary bonuses which insurance and reinsurance undertakings expect to make, whether or not those payments are contractually guaranteed.

Figure 6. Percentage changes in the valuation process of technical reserves to the economic value, according to requirements of Solvency II

According to Solvency II the reasons that caused decline of technical reserves were their realistic valuation (negative reserves were not replaced by zero, and changes in discounting).

Insurance companies which operate within the Slovak Republic are obliged to prove their adequate technical reserve value to the National Bank of Slovakia. They have to undertake a liability adequacy test. In IFRS 4 Insurance contracts is a test defined as a test for the adequacy of recognised insurance liabilities where the accounting value, based on the signed contract of a liability is examined. Test results show whether this value shall not be increased. Test discovery could also be a reason for a decrease of an accounting value which relates to deferred acquisition costs of insurance contracts or which relates to associated intangible assets. In both cases the assumption based on review of future cash flows. If the test proves that examined insurance company’s technical reserves are not high enough its volume must be increased. In case that the liability adequacy test would show that company has enough technical reserves its volume shall not be declined.

13 IFRS 4 Insurance contracts – definitions from the Appendix A.
3. TECHNICAL RESERVE IN THE DISCLOSURE PROCESS ACCORDING TO IFRS

Insurance companies create their technical reserves in the form of funds from where they cover variations of insurance business. Simply said, technical reserves represent company’s liabilities\(^{14}\) where it is more certain than uncertain that in the future the financial settlement will come in its time. Liabilities reported in a company’s balance sheet, that is reported according to IFRS, have to meet conditions for recognition and disclosure in the balance sheet, namely:

- liability is an existing obligation of the insurance company to provide benefits,
- the transaction is a result of past events,
- financial settlement of this transaction will mean an outflow of economic benefits for the insurance company,
- the amount of the financial settlement can be measured reliably.

\[ \text{probability of recovery} \]

\[ \text{reliable estimate of the amount} \]

\[ \text{existing obligation} \]

\[ \text{Recognition of commitment} \]

\[ \text{result of past events} \]

*Figure 7. Requirements for recognition and reporting of insurance company’s liability in the balance sheet*


Technical reserves represent long-term liability of the insurance company. Its final balance is disclosed in the balance sheet. Their formation shall be debited on the side of expenses and their use shall be credited on the side of revenues. This means that technical reserves considerably affect the profit or loss of the company which is disclosed in the profit and loss statement (IFRS uses term – profit and loss statements and statement of comprehensive income). For simplification of an accounting system, technical reserves are recognized only in the state of their changes.

\(^{14}\) Technical reserve’s value forms 60% to 70% of the company’s total liabilities value.
Table 1. Simplified balance sheet of the insurance company

<table>
<thead>
<tr>
<th>Assets</th>
<th>Balance sheet</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets</td>
<td></td>
<td>Equity and funds</td>
</tr>
<tr>
<td>Land and buildings</td>
<td><strong>Technical reserves</strong></td>
<td></td>
</tr>
<tr>
<td>Assets held for sale and discontinued</td>
<td>Technical reserves on behalf of</td>
<td></td>
</tr>
<tr>
<td>operations</td>
<td>the of policyholders</td>
<td></td>
</tr>
<tr>
<td>Property investments</td>
<td>Reserves</td>
<td></td>
</tr>
<tr>
<td>Investments in subsidiaries and associated</td>
<td>Deposits received from</td>
<td></td>
</tr>
<tr>
<td>companies</td>
<td>reinsurers (ceding)</td>
<td></td>
</tr>
<tr>
<td>Financial assets (investments)</td>
<td>Liabilities from insurance and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reinsurance</td>
<td></td>
</tr>
<tr>
<td>Investments for the benefit of policyholders</td>
<td>Accruals and deferrals</td>
<td></td>
</tr>
<tr>
<td>Receivables from insurance and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reinsurance and other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accruals and deferrals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>Equity and liabilities</td>
<td></td>
</tr>
</tbody>
</table>


Table 2. Technical reserves disclosed in the balance sheet of concrete insurance companies operating within the Slovak insurance market in the year 2015

<table>
<thead>
<tr>
<th>Business name of the insurance company</th>
<th>The amount of technical reserves in the balance sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz – Slovenská poisťovňa, a. s.</td>
<td>1 665 163</td>
</tr>
<tr>
<td>Generali Poisťovňa, a. s.</td>
<td>421 577</td>
</tr>
<tr>
<td>UNIQA, a. s.</td>
<td>142 562</td>
</tr>
<tr>
<td>Wűstenrot poisťovňa, a. s.</td>
<td>127 324</td>
</tr>
<tr>
<td>Union poisťovňa, a. s.</td>
<td>94 212</td>
</tr>
</tbody>
</table>

Source: based on annual reports of listed insurance companies.

As stated before, adoption of Solvency II caused the decline in the value of technical provisions. The following table demonstrates the amount of technical reserves reported in the balance sheet of the particular insurance companies where the reporting process was based on IFRS taking the requirements of Solvency II on their valuation into account. It needs to be pointed out that Solvency II became binding on insurance companies from January 1st 2016. Therefore the amounts shown in the table are counted as an assumption which is based on scientific articles of qualified professionals who are devoted to the new regulation matters – Solvency II. Financial statements prepared from the year 2016 will demonstrate whether these assumptions are appropriate or whether the calculation has significant deviations.
Table 3. Estimated value of technical reserves in the balance sheet of particular insurance companies operating within the Slovak insurance market in the year 2016, taking the requirements of Solvency II into account

<table>
<thead>
<tr>
<th>Business name of the insurance company</th>
<th>The amount of technical reserves in the balance sheet[^15]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz – Slovenská poisťovňa, a. s.</td>
<td>1 198 917</td>
</tr>
<tr>
<td>Generali Poisťovňa, a. s.</td>
<td>303 535</td>
</tr>
<tr>
<td>UNIQA, a. s.</td>
<td>102 645</td>
</tr>
<tr>
<td>Wüstenrot poistovňa, a. s.</td>
<td>91 673</td>
</tr>
<tr>
<td>Union poistovňa, a. s.</td>
<td>67 833</td>
</tr>
</tbody>
</table>

Source: base on the Table 3.

Applying the requirements of Solvency II, which caused a fall in the technical reserves value reported in the balance sheet, will force insurance companies to raise equity item.

CONCLUSION

Insurance companies must be able to meet their obligations taken on by insurance contracts. This means to take obligations which are not at the time of concluding the insurance contract properly known by the insurance company as well as by the policyholder[^16]. For this purpose, insurers are forced to create technical reserves beside their reserves that represent liabilities of uncertain timing or amount. Technical reserves can be defined as cash, formed by part of the insurance premium – based on mathematical models. Insurance company uses them for the purposes of meeting its obligations. A new regulation Solvency II which came to its force on 1st January 2016 brings significant changes in the valuation process of technical reserves. These changes will be reflected by their recognition in the financial statements prepared according to IFRS.

Proper valuation of technical reserves is an important process, therefore much attention is payed to it by insurance companies. The consequences of inaccurate valuation could lead to a threat to all involved entities in insurance business, insurance companies, policyholders – insured, shareholders, employees and others. Valuation of technical reserves according to Solvency II is based on fair value defined by IFRS. Instead of the fair value Solvency II uses the concept of economic value. The experts agree that despite the fact that continuous process of harmonization between the EIOPA and IFRS, whose effort is to align the valuation requirements as much as possible, and the differences of Solvency II and IFRS still exist. Even if the definitions of real and economic value are the same, the idea and meaning does not need to be the same as well.

Prognoses of the future predict that the application of the Solvency II will cause a decrease of the presented, resp. reported technical reserves value. The estimate for the life insurance is 29.70%, for the non-life insurance is 19.20% and in total 27.52%. The reality will show if these prognoses are right or if the reality at the insurance market will bring unexpected changes which could cause certain deviations. By the next year the financial statements of insurance companies compiled for the year 2016 will show the truth.

[^15]: The calculation is based on the Figure 6. For the simplicity we rounded the total technical reserves value from 27.52% to 28%. All other calculations are mathematically rounded to the nearest euro.
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REAL ESTATE AND IFRS WITH SPECIAL FOCUS ON IAS 40 INVESTMENT PROPERTY

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Abstract
The goal of this paper is to introduce the accounting treatment of real estate according to the International Financial Reporting Standards (IFRS), especially IAS 40 and to analyse, whether companies on the Prague Stock Exchange are using IAS 40 and fulfilling disclosure requirements. Similar research on IAS 40 discloser in other country or research on IFRS disclosers in several counties shows that the quality of discloser differs between the companies and the disclosure requirements are not always met. The complexity of IFRS for real estate makes it difficult for the users to review the financial statements without proper disclosers. The quantitative method used in this paper is to measure how many discloser criteria were met for companies on the Prague Stock Exchange using IAS 40. The key result of this paper is that the fulfilment of the disclosed requirements is very good (100%) for big international companies, such as VIENNA INSURANCE GROUP or ERSTE GROUP BANK AG or for purely real estate company VGP NV (100%). For Czech companies, where the Investment Property is only small part of the balance sheet (1%–15%) the disclosers are not clear or the requirements are not fully met. The result corresponds with the results from other similar papers in other countries.

Keywords: Financial statements, International Financial Reporting Standards, Real estate

JEL classification: G30, G210, G230, G28

1. INTRODUCTION

The main aim of this paper is to introduce accounting treatment of real estate according to the International Financial Reporting Standards (IFRS). The readers of this paper shall get an overview of the main international accounting standards (IAS), which are describing accounting treatment of real estate. Special focus is on IAS 40 Investment Property.

Investment property definition, classification, recognition, measurement and disclosure requirements will be briefly described for IAS 2, IAS 16 and IAS 40. Additionally IFRS 5 will be introduced.

This paper is looking for companies on the Prague Stock Exchange, which use IAS 40. If the companies use IAS 40, the paper describes which valuation method the companies use and it analyses whether they fulfil disclosure requirements according to the IAS 40. The reader of this paper shall get an overview of companies on Prague Stock Exchange, which use IAS 40.

The author will critically access the complexity of International Financial Reporting Standards (IFRS) for real estate and critically review the financial statements on Prague Stock Exchange, which were prepared in compliance with IAS40.

The main source of the data for this research paper is IFRS Foundation and the IASB1 and IASPlus2 for IFRS accounting policies and public information on Prague Stock Exchange (PSE)3 for financial statements.

1 http://www.ifrs.org
2 http://www.iasplus.com
3 www.pse.cz
2. IFRS RELATING TO AND INCLUDING ACCOUNTING TREATMENT OF REAL ESTATE

There are several IFRS and IAS relating and describing accounting treatment and disclosure requirements of real estate. The diversity of the standards and its different valuation methods may mislead non-professional users of financial statements. Both clear disclosure of accounting policies by the companies and deep knowledge of IFRS by the users is therefore necessary in analysing financial statements.

2.1 Real Estate in IFRS and IAS

Accounting of real estate is described in IAS 2 Inventories, IAS 16 Property, Plant and Equipment and IAS 40 Investment Property and closely related IFRS 5 Non-current Assets Held for Sale and Discontinued Operations and IFRS 13 Fair Value Measurement.

Definition, measurement and disclosure of the standards IAS 2, IAS 16 and IAS 40 will be described in the following paragraphs.

2.1.1 IAS 2 Inventories

Inventories are assets held for sale in the ordinary course of business, in the process of production for such sale or in the term of materials or supplies to be consumed in the production process or in the rendering of services. Inventories encompass also land and other property held for resale or property under construction that is going to be finished and sold. Typical real estate under IAS 2 is residential real estate and development of residential real estate.

Definition: Assets (in our case properties) held for sale in the ordinary course of business or in the process of construction for such sale and supplies and materials that are consumed in the production [IAS 2.6].

Measurement: Inventories needs to be stated at the lower of cost and net realizable value [IAS 2.9]. The highest limit of valuation for IAS 2 inventories is the costs.

Costs of purchase, costs of production and other costs incurred in bringing the inventories to their present location and condition are included [IAS 2.10], interest costs incurred under development can be capitalized under defined conditions [IAS 2.17 and IAS 23.4].

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and the estimated costs necessary to realize the sale. [IAS 2.6]

IAS 2 allows the FIFO (First In First Out) or weighted average cost formulas. [IAS 2.25] The LIFO which was allowed till 2003 is no longer allowed.

Disclosure: [IAS 2.36]:
- accounting policy,
- carrying amount of merchandise, supplies, materials, work in progress, and finished goods,
- carrying amount of any inventories carried at fair value less costs to sell,
- amount of any write-down of inventories recognized as an expense in the period,
- amount of any reversal of a write-down to NRV and the circumstances that led to such reversal,
- carrying amount of inventories pledged as security for liabilities,
- cost of inventories recognized as expense (cost of goods sold).

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2.1.2 IAS 16 Property, Plant and Equipment

**Definition:** Properties used by the owner in ordinary course of business. Owner-occupied property is property held by the owner (or by the lessee under a finance lease) for use in the production or supply of goods or services or for administrative purposes. In some cases, an entity owns property which is leased to, or occupied by another group company.

Property, plant and equipment are tangible items:
(a) held for use in the production or supply of goods or services, for rental to others, or for administrative purposes and
(b) are expected to be used during more than one period.

This standard applies to the accounting for most of the property, plant and equipment, except where another standard requires or permits differing accounting treatment, for example: IAS 2, IAS 40, and IFRS 5 Non-current Assets Held for Sale and Discontinued operation.

**Measurement**

An item of property, plant and equipment should initially be recorded at cost. [IAS 16.15]

The standard specifies that an item of property is recognised as an asset only if it is probable that future economic benefits associated with the item will flow to the company and the cost of the item can be measured reliably.

Subsequent to the initial measurement IAS 16 permits two accounting models:
- Cost model. The asset is carried at cost less accumulated depreciation and impairment [IAS 16.30]
- Revaluation model. The asset is carried at a revalued amount, being its fair value at the date of revaluation less subsequent depreciation and impairment [IAS 16.31]

Revalued assets are depreciated in the same way as under the cost model.
If a revaluation results in an increase in value, it should be credited to other comprehensive income and booked into the equity under "revaluation surplus" unless it represents the reversal of a revaluation decrease of the same asset previously recognized as an expense, in which case it should be recognized in profit or loss. [IAS 16.39]

A decrease arising as a result of a revaluation should be recognized as an expense to the extent that it exceeds any amount previously credited to the revaluation surplus relating to the same asset. [IAS 16.40]

**Disclosure**

For each class of property, plant, and equipment, disclose: [IAS 16.73, IAS 16.74, IAS 16.77]
- basis for measuring carrying amount
- depreciation method(s) used
- useful lives or depreciation rates
- gross carrying amount and accumulated and impairment losses
- recognition of the carrying amount at the beginning and the end of the period, showing:
  - additions
  - disposals
  - acquisition through business combination
  - revaluation increases or decreases

---

o impairment losses
o reversals of impairment losses
o depreciation
o net foreign exchange differences on translation
o other movements

- restrictions on title and items pledged as security for liabilities
- expenditures to construct property, plant, and equipment during the period
- contractual commitments to acquire property, plant, and equipment
- compensation from third parties for items of property, plant, and equipment that were impaired, lost or given up that is included in profit or loss
- revalued property, plant and equipment
- the effective date of the revaluation
- whether an independent appraiser was involved
- for each revalued class of property, the carrying amount that would have been recognized had the assets been carried under the cost model
- the revaluation surplus, including changes during the period and any restrictions on the distribution of the balance to shareholders.

2.1.3 IAS 40 Investment Property

Definition: IAS 40 defines investment property as property (land or a (part of a) building or both) held (by the owner or by the lessee under a finance lease) in order to earn rentals and/or for capital appreciation [IAS 40.5]

Property used in the production or supply of goods or services as well as used for administrative purposes is not an investment property according to IAS 40 – in this case, IAS 16 Property, Plant and Equipment applies (see chapter 2.1.2). Property held for sale in the ordinary course of business is outside the scope of this standard and is to be accounted for in accordance with IAS 2 (see chapter 2.1.1). The property shall also not be held for sale under IFRS 5 (see chapter 2.1.5).

Measurement
An investment property shall be measured initially at its cost. Transaction costs shall be included in the initial measurement. [IAS 40.20 and 40.23]

Subsequent to the initial measurement IAS 40 permits two accounting models [IAS 40.30]:

- Cost model. The asset is carried at cost less accumulated depreciation and impairment
- Fair value model. The asset is carried at a fair value, being its fair value at the date of valuation

Fair value model
Investment property is being measured to fair value, which is the amount for which the property could be exchanged between knowledgeable, willing parties in an arm's length transaction. [IAS 40.5] Gains or losses arising from changes in the fair value of investment property must be included in net profit or loss for the period in which it arises. [IAS 40.35]

The valuation methods are in more detail described under IFRS 13 (see chapter 2.1.5).

Disclosure
Fair value model and cost model [IAS 40.75]

- whether the fair value or the cost model is used
- if the fair value model is used, whether property interests held under operating leases are classified and accounted for as investment property

• if classification is difficult, the criteria to distinguish investment property from owner-occupied property and from property held for sale
• the methods and significant assumptions applied in determining the fair value of investment property
• the extent to which the fair value of investment property is based on a valuation by a qualified independent valuer; if there has been no such valuation, that fact must be disclosed
• the amounts recognised in profit or loss for:
  o rental income from investment property
  o direct operating expenses (including repairs and maintenance) arising from investment property that generated rental income during the period
  o direct operating expenses (including repairs and maintenance) arising from investment property that did not generate rental income during the period
  o the cumulative change in fair value recognised in profit or loss on a sale from a pool of assets in which the cost model is used into a pool in which the fair value model is used
• restrictions on the realisability of investment property or the remittance of income and proceeds of disposal
• contractual obligations to purchase, construct, or develop investment property or for repairs, maintenance or enhancements

Disclosures for the Fair Value Model [IAS 40.76]
• a reconciliation between the carrying amounts of investment property at the beginning and end of the period, showing additions, disposals, fair value adjustments, net foreign exchange differences, transfers to and from inventories and owner-occupied property, and other changes [IAS 40.76]
• significant adjustments to an outside valuation (if any) [IAS 40.77]
• if an entity that otherwise uses the fair value model measures an item of investment property using the cost model, certain additional disclosures are required [IAS 40.78]

Disclosures for the Cost Model [IAS 40.79]
• the depreciation methods used
• the useful lives or the depreciation rates used
• the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period
• a reconciliation of the carrying amount of investment property at the beginning and end of the period, showing additions, disposals, depreciation, impairment recognised or reversed, foreign exchange differences, transfers to and from inventories and owner-occupied property, and other changes
• the fair value of investment property. If the fair value of an item of investment property cannot be measured reliably, additional disclosures are required, including, if possible, the range of estimates within which fair value is highly likely to lie

2.1.4 Summary, Decision about IFRS Accounting Treatment for Real Estate and Valuation
The decision regarding the classification of real estate is based on the purpose of the real estate in other words based on current and future use of the real estate.
• Real estate held/developing for sale in the ordinary course of business is classified under IAS 2 (see chapter 2.1.1)
• Real estate for own use is classified under IAS 16 (see chapter 2.1.2)
• Real estate for investment meaning for increase of value and/or for rent income is classified under IAS 16 (see chapter 2.1.3)
• Real estate held for sale is classified under IFRS 5 (see chapter 2.1.5)
Valuation (Measurement) method depends on the classification of the real estate. IAS 2, IAS 16 and IAS 40 have two options of valuation method.

- Cost model: the asset is carried at cost less accumulated depreciation and impairment [IAS 16.30]. Depreciations are booked into the profit and loss.
- Revaluation model: the asset is carried at a revalued amount, being its fair value at the date of revaluation less subsequent depreciation and impairment [IAS 16.31]. Depreciations are booked into the profit and loss and revaluation results in the other comprehensive income.
- Fair value model: the asset is carried at fair value, being its fair value at the date of valuation. Revaluation is booked into the profit and loss.
- FIFO: the oldest inventory items are recorded as sold. FIFO is specific cost model.
- Weighted average costs: the sold item is valued based on weighted average costs for all inventories. WAC is specific cost model.

Specific valuation is for real estate held for sale 5 (see chapter 2.1.5). The real estate held for sale is measured at the lower of carrying amount and fair value less costs to sell. Theoretically it can be all above described method or fair value less costs to sell.

The author of this paper considers many classification methods and many valuation methods for real estate under IFRS possibly misleading for the non-professional users. The users of the financial statements cannot – without deep knowledge of IFRS and without proper and detail disclosure in the notes to the financial statements – assess the financial position and profitability of the company.

The first step of simplification may be the end of the possibility of using the revaluation method, which is complicated both for users and for producers of financial statements. Revaluation method is also not commonly used.
More radical approaches would be to consolidate IAS 2, IAS 15 and IAS 40 into only one IAS and to allow only cost method for real estate under development and possibility of costs method and fair value method for standing real estate. The company which is considering investment in real estate for own use or for investment shall theoretically use similar approach for considering the investment. Valuation of development is much more volatile and costs method may be more appropriate. On the other hand for standing real estate the fair value method may better reflect the actual value, but for some companies it may be rather difficult to reevaluate all real estate to fair value and therefore cost method shall stay as an option.

2.1.5 Other IAS and IFRS relating to real estate
There are other international accounting standards relating to the real estate. IFRS 5 and IFRS 13 were already mentioned and will be described below. Important are also IAS 36 Impairment of Assets, IAS 17 Leases and IAS 11 Construction Contracts, which are out of scope of this paper.

IAS 5
IFRS 5 Non-current Assets Held for Sale and Discontinued Operations describes accounting principles for non-current assets (in our case real estate) held for sale (or for distribution to owners). Such real estate is not depreciated anymore and is measured at the lower of carrying amount and fair value less costs to sell, and is presented separately in the statement of financial position. Specific disclosures are also required for discontinued operations and disposals of non-current assets.

Real estate under IFRS 5 is therefore valued either under the original standard (IAS 2, IAS 16 or IAS 40) or at fair value less costs to sell.

The following conditions must be met for real estate to be classified as held for sale: [IFRS 5.6-8]
- management is committed to a plan to sell
- the asset is available for immediate sale
- an active program to locate a buyer is initiated
- the sale is highly probable, within 12 months
- the asset is being actively marketed for sale at a sales price reasonable in relation to its fair value
- actions required to complete the plan indicate that it is unlikely that plan will be significantly changed or withdrawn

3. COMPANIES USING IAS 40 ON PRAGUE STOCK EXCHANGE
As of September 2016 24 companies are traded on the Prague Stock Exchange. 9 (37.5%) of the publicly traded companies have Investment Property on balance sheet and shall fully disclose information according to the IAS 40. Only VGP NV is actually a real estate investment fund with clear main focus on real estate.

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The disclosure requirements under IAS 40 are extensive, but are necessary to fully understand the financial situation and performance of the company relating and arising from the investment in real estate. The most important disclosure is of course the valuation method. 5 out of the 9 companies have selected the fair value model. Also the companies using the costs model are obliged to present the fair value of the real estate in the notes. Actually one of the companies has not fulfilled it and one has the exact same fair value as book value (without impairment) in 2013 and 2014, which seems to be a rather big coincidence. Not all companies have fully disclosed all necessary information or the information was not clearly stated.

Table 1. Companies on Prague Stock Exchange

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Issuer’s business activity</th>
<th>Latest financial statements available</th>
<th>Using IAS 40?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borealis Exploration Limited</td>
<td>Mineral exploration and prospecting, scientific and research programs, technologies development programs</td>
<td>2015 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>CENTRAL EUROPEAN MEDIA ENTERPRISES LTD.</td>
<td>Owning and operating of commercial TV stations in Central and Eastern Europe.</td>
<td>2015 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>ČEZ, a.s.</td>
<td>Sale of electricity</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>EAU a.s.</td>
<td>Operation of photovoltaic power plants</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Energoaqua, a.s.</td>
<td>Production and distribution of technical gas</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>ENERGOCHEMICA SE</td>
<td>Production, trade and services not listed in appendix 1 to 3 of the trades licensing act</td>
<td>2014 Annual Report</td>
<td>YES in 2013</td>
</tr>
<tr>
<td>ERSTE GROUP BANK AG</td>
<td>Banking facilities</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>Fortuna Entertainment Group N. V.</td>
<td>Fixed-odds betting operator</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Jáchymov Property Management, a.s.</td>
<td>in liquidation - other advisory in the field of entrepreneurship and management</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Kofola ČeskoSlovensko a.s.</td>
<td>Production of non-alcoholic beverages and related activities</td>
<td>2. Q. 2015 Report</td>
<td>NO</td>
</tr>
<tr>
<td>Komerční banka, a.s.</td>
<td>Banking facilities</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>New World Resources Plc</td>
<td>Searching, mining and sale of pit-coal</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>O2 Czech Republic a.s.</td>
<td>Telecommunications operator</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>PEGAS NONWOVENS SA</td>
<td>Production of nonwoven textiles</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Philip Morris ČR a.s.</td>
<td>Production of tobacco products</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Pivovary Lobkowicz Group, a.s.</td>
<td>Production of beer, malt, non-alcoholic beverages and other production</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Pražské služby, a.s.</td>
<td>Sanitary department, road maintenance, waste disposal, waste dumps maintenance</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>RMS Mezzanine, a.s.</td>
<td>non-banking financing market in the Central and Eastern Europe region</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>STOCK SPIRITS GROUP PLC</td>
<td>Production of alcoholic beverages</td>
<td>2014 Annual Report</td>
<td>NO</td>
</tr>
<tr>
<td>Tatry mountain resorts, a.s.</td>
<td>Sport facilities operating</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>TOMA, a.s.</td>
<td>Financial enterprise, business participation in the line of tanning and chemical production, energy services, real estate property rental</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>UNIPETROL, a.s.</td>
<td>Crude oil processing, production of petrochemical products</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>VGP NV</td>
<td>Develops, builds and leases high-quality logistics and semi-industrial real estate as well as ancillary offices.</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
<tr>
<td>VIENNA INSURANCE GROUP</td>
<td>Financial services - insurance</td>
<td>2014 Annual Report</td>
<td>YES</td>
</tr>
</tbody>
</table>

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Table 2. Disclosure of companies with IAS⁹

<table>
<thead>
<tr>
<th>Disclosures</th>
<th>Energoaqua, a.s.</th>
<th>ENERGOCHEM ICA SE</th>
<th>ERSTE GROUP BANK AG</th>
<th>Pražské služby, a.s.</th>
<th>Tatry mountain resorts, a.s.</th>
<th>TORMA, a.s.</th>
<th>UNIPETROL, a.s.</th>
<th>VGP NV</th>
<th>VIENNA INSURANCE GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost model or fair value model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
<td>Cost Model</td>
</tr>
<tr>
<td>% of total assets</td>
<td>15.00%</td>
<td>12.00%</td>
<td>4.40%</td>
<td>2.00%</td>
<td>19.70%</td>
<td>3.00%</td>
<td>89.00%</td>
<td>3.00%</td>
<td>9.00%</td>
</tr>
<tr>
<td>If the fair value model is used, whether property interests held under operating leases are classified and accounted for as investment property</td>
<td>YES</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>NOT/NA</td>
<td>N/A</td>
<td>YES</td>
<td>YES</td>
<td>N/A</td>
</tr>
<tr>
<td>If classification is difficult, the criteria to distinguish investment property from owner-occupied property and from property held for sale</td>
<td>N/A</td>
<td>N/A</td>
<td>YES</td>
<td>N/A</td>
<td>NOT/NA</td>
<td>NO</td>
<td>N/A</td>
<td>N/A</td>
<td>YES</td>
</tr>
<tr>
<td>If methods and significant assumptions applied in determining the fair value of investment property</td>
<td>N/A</td>
<td>N/A</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>the extent to which the fair value of investment property is based on a valuation by a qualified independent valuer; if there has been no such valuation, that fact must be disclosed</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>A reconciliation between the carrying amounts of investment property, owner-occupied property, and other changes [IAS 40.76]</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Significant adjustments to an outside valuation (if any) [IAS 40.77]</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>If an entity that otherwise uses the fair value model measures an item of investment property using the cost model, certain additional disclosures are required [IAS 40.78]</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

4. CONCLUSION

The accounting of real estate under IFRS is divided into three standards (IAS 2, 16 and 40) and the different measurement methods make the financial statements hardly comparable without proper dicloser. To overcome this problem International Financial Reporting Standards require extensive discloser requirements. Not all companies, which are using IAS 40 on Prague stock Exchange fully and clearly disclose all necessary information. The non-professional user of financial statements is therefore facing three problems: difficulty of understanding classification of real estate and its measurement and not full information in the financial statements. The fulfilment of the disclosed requirements is very good (100%) for big international companies, such as VIENNA INSURANCE GROUP or ERSTE GROUP BANK AG or for purely real estate company VGP NV (100%). For Czech companies, where the Investment Property is only small part of the balance sheet (1%–15%)

⁹ www.pse.cz
the disclosers are not clear or the requirements are not fully met. The result corresponds with the results from other similar papers in other countries.

**Scientific objective:** IP 100040
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**REFERENCES**


Abstract
The article presents a comparative analysis in the income tax from individuals in Poland. Various components of income tax from individuals were submitted to the evaluation, to show the essence of these two models of taxation. The article is based on both theoretical considerations and economic simulations.

Key words: tax, personal income tax, taxation

JEL Code: Finance

INTRODUCTION
The state budget in Poland is powered through a variety of taxes. One of the biggest incomes is provided by the income tax from individuals. This is a public tribute that is paid by individuals, both working on a contract of employment, as well as by self-employed. The purpose of this article is to present the structure of income tax from individuals as a specific tool of fiscal policy.

1. SCOPE OF THE PERSONAL INCOME TAX FROM INDIVIDUALS
Income tax payers are natural persons. Neither the Tax Code, nor any other tax laws does not define the term "natural person". In determining the definition of a natural person it is necessary to base on provisions of Article 8 of the Civil Code, which states that a natural person is any person from the moment of birth until death.

Subjectivity in Polish tax personal income was based primarily on the so-called principle residence, which depends on the place of residence of the individual and is associated with the so-called unlimited tax liability. A person with the place of residence in the territory of the Republic of Poland pays tax on all their domestic and foreign income, regardless of the location of the source of income. When there is no evidence to assign liability to tax residence, other criteria is used to assign it, according to the principle source, it means that the place of achieving incomes is taken into consideration. Taxpayers of income tax may therefore be natural persons not being Polish residents, but gaining incomes here. Limited tax liability is based on the fact that an individual who was not a resident in the territory of the Republic of Poland is taxed on the incomes earned in its territory on the basis of the employment contract or employment relationship, regardless of the place of payment of wages and other income earned in Poland (e.g. from dividends, management contracts). Such a broad definition of Polish tax jurisdiction can lead to double taxation of the same income earned by a single person in the country of residence and the country of source of income. The internal provisions of tax law and international agreements on avoidance of double taxation are assigned to prevent double taxation of income of individuals.

A special category of taxpayers are spouses. Namely, they can be combined by means of the so-called taxation. Marital quotient, subject to the following conditions:

- remain married throughout the whole tax year;
remain in the marital community property throughout the tax year (reduction of commonality does not meet this condition);
common and the right term handing in the application for the joint taxation;
one of the spouses (or a single parent) do not use at the same time the tax under the terms of the Act of 20 November 1998 on a flat-rate income tax from certain incomes earned by individuals; not using the tax from non-agricultural activities 19% tax rate.

The death of a spouse before making a joint return does not prevent the joint taxation [1], the absence of a request for joint taxation prevents joint clearing the spouses. In addition, no matter that the spouses live separately and due to the place of their residence report to properties of various tax authorities. If the spouses live separately, a local jurisdiction tax authority is designated by them in the common annual tax return. This possibility of accounting for their personal income cannot be used by those, who remain in concubine age. The design of the total tax also applies to single parents. Accumulation of the spouse's income (single parents) is the aggregation of the spouse's income, or adding the income of juvenile children, and then dividing the sum of the revenue in half. Tax is calculated on the mid-income and multiplied by two, and set to the name of both spouses. A special category of taxpayers are also companies without legal personality. Companies of this type are known as indirect tax entities that do not have a tax obligation, despite getting some income, which indeed generate income, but not under their tax liability. Therefore, the taxpayer is not the company not having a legal entity but natural persons who are shareholders. Calculation of tax in such entities is carried out in two phases: the first is fixed income of the company, the second is fixed partner's income to participate in the company, assuming that the partner's income (loss) is proportional to its share of the company, in the absence of arrangements for shares that the members' shares are equal.

2. THE SCOPE OF THE INCOME TAX ON INDIVIDUALS

The scope of the tax on the income of natural persons include all types of income, except incomes that have been qualified by law to these exemption categories.

The income is understood as the sum of the excess of revenues over costs of obtaining a given fiscal year, except as expressly exempt from taxation. In addition to these exemptions Polish legislator singled out some income that do not add up (e.g. The income from the sale of the property cannot be combined with income from other sources; this includes income from undisclosed sources of incomes or not having the coverage in disclosed sources or dividends). Exclusion of certain incomes (revenues) from the general revenue of the individual does not mean that they are not subject to income tax. Revenue from income sources not included in the overall income are generally taxed separately, mostly in the form of lump-sum tax. Entrepreneurs have a choice of methods of taxation, they may either:

extract business income from other sources of income and to pay for so the extracted partial income flat tax (proportional) by 19% tax rate;
or accumulate income from business with other sources of income and to be taxed on that income recognized by the global progressive tax scale (then have the opportunity to use the tax provided for in relief).

The taxpayer may be in a situation in which the deductible expenses exceed the amount of income, then such a person suffers a loss. Then the taxpayer may deduct a loss (except for any loss arising from the sale of property and property rights, and income, the proceeds of which are free of income tax) on income earned in the next 5 fiscal years from the same source, which brought the loss. Sources of income can be divided into two categories: the first related to the work and the second with a fortune.
3. EXEMPTION FROM INCOME TAX ON INDIVIDUALS

Exemptions are mainly related symptoms the so-called tax immunity of diplomatic and consular primarily resulting from the provisions of public international law. Individual exemption can be divided into following groups:

- a social nature (e.g. family benefits paid pursuant to the provisions on family benefits, family allowances and care, alimony payments and childbirth paid under separate regulations, grants received under the provisions of degrees and academic titles and degrees and title arts, scholarships PhD),
- the nature damages and liability business insurance (e.g. as defined in the labour law severance and compensation for shortening the period of termination of employment, pensions granted on the basis of separate regulations on provision for war and military invalids and their families),
- some work-related income (e.g. the value received by the employee from the employer bills, vouchers, coupons or other evidence of entitlement to obtain on the basis of their meals, food or soft drinks,
- some of the revenue associated with the sale (e.g. the revenue generated from the conversion of a residential building),
- some income pensioners (e.g. cash allowance for some pensioners and persons receiving retirement benefit or allowance)
- associated with diets (e.g. business trip employee),
- some income from capital and property rights,
- some manifestations of economic activity,
- exempt certain income earned abroad (e.g. revenue from foreign governments, international organizations and international financial institutions from the non-repayable aid).

4. TAXATION BASE

The taxation base in the income tax from individuals is essentially the sum of income from various sources of revenue. Legislature defines income as the positive difference between the proceeds and the cost of obtaining them in a tax year.

Revenue is the money, the value of money and the value of benefits received in kind and other free services received or left available to the taxpayer in a calendar year. In the case of non-agricultural economic activities the incomes are the amounts no matter they are received. Entrepreneurs are obliged to pay taxes in respect of the business, without the actual revenue. In the case of real estate surrendered free to the use of other people - the revenue is so called rental values, which means the equivalent of rent, which the taxpayer would receive in the event of the conclusion of the lease of immovable property. In the case of the transfer of goods and property rights is converted the transferred property or property right of a higher value, reduced by the costs to replace. A special category is the taxable income of the so-called undisclosed sources, which shall be determined by taking as the sum of incurred expenses in the tax year and the value stored in this year's financial resources which were not available to cover the already taxed or tax-free sources of income and resources of previously owned property.

Deductible costs of individual sources are all the costs incurred to generate revenue, with the exception of the costs referred to by law. The taxpayer has the ability to deduct for tax purposes any expenditure under this condition, however, that demonstrates the direct link to the business activity or other gainful activity, and suffering those costs has or may have a direct impact on the amount of income earned. The legislature has entered into a catalogue of expenses not deductible for income, and these are:

- expenses for the acquisition of fixed assets, the cost of this type can be considered in the cost operators primarily through depreciation deductions;
expenses related to the execution by the taxpayer obligations to its creditors and losses related to defaults by debtors of the taxpayer (e.g. the repayment of loans, receivables written off as uncollectible, the reserve created to cover the debt, which irrecoverable had been probable);

- expenses having the nature of financial sanctions (e.g. fines and penalties, enforcement costs associated with defaults, penalties and damages);

- expenses related to the settlement of tax liabilities (e.g. from excise taxes on excessive defects or deficiencies attributable to the products, income tax, inheritance tax and gift tax and tax on the sale of shares in public trading and tax on goods and services);

In the case of entities required to maintain books of accounts and records of income and expenses deductible expenses actually incurred should be covered by reliable and accurate books, supportable by accounting documents.

There is also the possibility of flat-rate determination of the cost of obtaining certain revenues (e.g. revenue from copyright – 50% of contracts – 20%). If the taxpayer establishes that the cost of revenues were higher than those resulting from the application of the standard rate, the cost of obtaining shall be in the amount of the costs actually incurred.

In some revenue costs are considered by the legislature at the same time as income (e.g. Income from capital gains), in such cases, tax deductible expenses are not set.

Income, depending on the type of activity covered by the tax, and the people running them can be set differently. U taxpayers preparing balance sheets and income statement, income from business activity is the income shown on the basis of properly maintained, reduced by the tax-free income and increased expenditure deductible costs previously included in deductible expenses. At taxpayer's achieving income from business activity and leading tax revenue and expense ledger – income from operations is the difference between the revenue and the costs of obtaining, taking into account differences in the initial and final stocktaking and sale of fixed assets related to the business. In relation to persons who are not required to keep books, the income can be documented by all means of evidence of the Tax Code. In addition, expenses can be deducted only in the tax year in which they are actually incurred.

Reliefs in income tax from individuals
By means of appropriate financial policies, the country can contribute to the realization of taxes for purposes other than fiscal. This is possible thanks to the tax relief favouring certain business lines, its manifestations, or situations in which they were referred to the taxpayers. Legal structures and tax interventions may rely on the use of periodic or perpetual preference for certain taxpayers or for specific activities. Tax benefits of a subjective or objective, temporary or perpetual, can rely on:

- the deductibility of certain specific expenses from the tax base before tax;
- the possibility of use in some cases, a lower tax rate generally applicable;
- able to deduct certain expenses from tax due.

By the tax credit shall be construed under the tax law exemptions, deductions, reductions or reduce the use of which reduces the tax base or the amount of tax (such definition is formulated Tax Code).

According to the criterion of the subject-tax relief enjoyed by taxpayers of personal income tax can be divided into two groups:

- vested entities conducting business (e.g. Relief for apprenticeship or income from training schools), the legislature included here in:
  - relief involving the deductible from earned income (e.g. social security contributions);
  - relief involving the deductible;
  - relief of applying a lower rate of tax;

- entities not vested economic activity, categories of relief here are the same as in the case of business.
The income can be deducted:
- social security contributions of paid in the tax year immediately for their own pension, disability pension, sickness and accident taxpayer and those working with him, deducted in the year of the tax payer funded by the taxpayer to the pension and disability and health insurance,
- made in the tax year returns unduly benefits that previously increased taxable income in the amounts obtained taking into account income tax if the returns have not been deducted by the payer,
- spending on rehabilitation and expenses associated with facilitating the exercise of vital signs, incurred in the fiscal year by the taxpayer or the taxpayer a disabled person on whose dependents are people with disabilities,
- donations donated to (but not more than 6% of income): on referred to in Article. 4 of the Act on public benefit organizations, referred to in Art. 3. 2 and 3 of the Law on Public Benefit conducting charitable activities in the sphere of public tasks specified in this law, pursuing these goals, of religious,
- actually incurred expenses in the fiscal year to pay off the interest on the loan (loans) granted to the taxpayer, to finance investments to meet their own housing needs.

Longer than the calculated tax can be deducted:
- the amount of health insurance premiums,
- payments to public benefit organizations operating on the basis of the Law on Public Benefit up to 1% of the amount calculated,
- from 1 January 2007. Taxpayers caring for children or adopted children, settling on general principles using the tax scale, can deduct the tax amount representing the product of the number of children in their care and EUR 1 173,00 zł.

Lump sum tax (at a height less than the basic rate) is taken among from:
- prizes in contests, games and mutual wagering or prizes associated with the sale of premium in the amount of 10% of the winnings or prizes,
- the benefits received by pensioners, in connection with its previously joining a labor relationship of subordination, employment relationship or work under a cooperative working relationship with the subject – 10% of receivables.

Relief can be divided into:
- take into account incurred by the taxpayer cost of obtaining revenue (e.g. Relief for social security contributions);
- corresponding to the reimbursement of costs associated with the life of the taxpayer (e.g. Relief for the rehabilitation of disabled person taxpayer and tax related to housing);
- relief of a family, including e.g. As related to the rehabilitation of disabled members of the family;
- relief of a stimulus (e.g. Donations socially useful);
- relief having the character of a technical procedure (e.g. The return unduly pensions, thereby preventing non-existent income tax).

The Tax Scale
The tax scale is laid down in Art. Paragraph 27. 1 and 1a of the Income Tax Act from individuals and does not apply to taxable income in simplified forms, but only with respect to the income taxed on general principles. Tax rates determine the amount of tax in relation to the tax base and the tax are in the nature of progressive rates. From 1 January 2009, they are respectively 18% and 32%. Income which do not implement the Polish income tax principles of universality of this and are not included in the taxpayer's total income and taxed separately have been burdened with proportional rates of different heights. These include
• in the case of flat-rate income tax from the sale or exchange of property and property rights – 19% of the revenue;
• income from literary activity, from sports, copyright, journalism also not be combined with other income and is determined as a lump sum equal to 20% of earned income;
• prizes in contests and games and prizes for the sale of premium pay rate is 10%;
• remuneration for assisting the police, tax inspection authorities, border guards, appropriate intelligence and counterintelligence services are taxed at 20% of salary;
• income from undisclosed sources of income tax is determined by the 75% rate in relation to the income (i.e. The rate of sanction).

All capital income (e.g. Interest on bank deposits, gains from the sale of shares) bear interest at 19% tax rate, and in some cases it is possible to take into account the deductible.

The consumption of the tax on personal income
The Act establishes the tax payers of personal income, above all workplaces (including individual employers), agricultural cooperatives, pension authorities, banks paying foreign pension, paid employment authorities of their benefits, Guaranteed Employee Benefits Fund, organizational units paying scholarships social integration centres. These authorities are obliged as payers throughout the year to calculate, deduct amounts paid to taxpayers with outstanding advances for the income tax and the discharge of these amounts on account of the tax office.

Some groups of taxpayers are required to self-assess tax advances, the declaration of monthly income and timely payment of these advances. For such a self, without the participation of the payer, the calculation of income tax payments are required : self-employed, in this and in the range of professions; persons receiving remuneration for the rental or lease; persons conducting special agricultural production; persons receiving remuneration from abroad; persons receiving pensions from abroad without the mediation of payers.

Taxpayers have also a duty on or before April 30 of the following year, submit to the tax office at the appropriate print statement about the amount of income (loss) in the fiscal year. Persons engaged in accounts (commercial) to join the annual balance sheet statements of account results. Taxpayers who have the obligation to file a tax return are also obliging to pay the difference between the tax due on the income resulting from the tax return and the amount due for the year advances, including those taken by all payers (including e.g. Customers). Income tax return is a result of the tax due for the year, unless the tax office will issue a decision, which will determine the amount of tax another. In the event of failure to submit evidence of his income tax office issues a decision declaratory, specifying the amount of income tax liability. In relation to the taxpayer's tax returns nieskładającego is possible to apply criminal sanctions under the Criminal Code of the tax.

5. ACCOUNTING RECORDS FOR TAX PURPOSES

The Act imposes on taxpayers' income tax obligation to keep accounting records. At the same time the provisions of the Act don’t determine the rules of its conduct. They refer in this respect to the taxpayer of separate regulations, including in particular the Act of 29 September 1994 concerning accounting and regulations issued on its basis.

Records of accounting for income tax purposes is to be conducted in accordance with accounting regulations and in a manner enabling determination of income or loss of the tax base and the tax payable for the tax year. Mentioned records are accounts that the taxpayer leads in accordance with the Accounting Act. But also leading book must take into account the provisions of the Income Tax Act from individuals and lead them in such a way as to determine the amount of income (loss), the tax base and the amount of tax due. This principle also applies to records of fixed assets and intangible assets, which should include the data necessary to determine the amount of depreciation for tax purposes.
Accounting records should enable calculation:
- income, including taxable income and revenues constituting tax revenues,
- deductible costs and expenses amounts which are not considered as deductible costs,
- income free of tax and losses from sources that are free from tax.

As recorded accounting should also include:
- revenues from untaxed sources, such as the farming and forestry,
- income earned abroad,
- revenues from shares in the profits of legal persons (e.g. the redemption of shares, dividends),
- earned income or losses from a common source, which means the shares of companies without legal personality, with shared ownership, joint ownership, common use rights and property of things, joint venture.

It is therefore necessary to properly construct the records for the tax settlement. Accounts accounting used for the calculation of income and expenses should be divided and should separately check in revenues and costs, which:
- will go into the calculation of the tax,
- will not be taken into account when setting the tax.

Suitable constructing the rules for recording business transactions affecting the income tax on individuals is very important from the point of view of the business. The lack of rules would mean the lack of proper calculation of payable tax, as well as exposure to the board on criminal liability.

**SUMMARY**

The regulations are very important from the point of view of the Polish economy, because with their help, the government can interact for the individuals. Firstly, can control the demand accordingly, thereby deciding on the consumption of the relevant goods. Secondly, can assist the relevant sectors of the economy adding to entrepreneurship. Goals are sometimes difficult to achieve, because it undermines the existence of the shadow economy. For those deciding on tax deductibility it is unfortunately difficult task, because they have to balance a number of economic tasks.

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MARCINIUK J. (2014). *Commentary on income tax from individuals*. Warsaw.
Summary and Final Comments

The “IFRS – Global Rules and Local Use – 2016” conference is the fourth in a series of the same title, and which have taken place annually since 2013 at Anglo-American University, Prague. The main topics of the conference have been changes in conditions of IFRS implementation, accounting harmonization over the last decade and related issues.

The original aim of the conference was to bring together experts in accounting theory and practice to share a more creative environment with the academic and student communities to enable an exchange of ideas regarding application of International Financial Reporting Standards (IFRS) to specific national situations.

This year, special attention has been given to IFRS implementation from several perspectives through the lens of ten years’ experience in different cultural conditions, as well as changes introduced through the latest EU directives. Ten years after implementation of IFRS as an obligatory form of financial reporting for financial markets, recognition of new dimensions to financial reporting harmonization, and a new series of issues – such as the true effects of the IFRS adoption, the role of cultural dynamics in the process of accounting harmonization, costs and benefits of IFRS adoption, impact of IFRS on internal corporate information systems and other related issues – has been triggered. Experience with IFRS implementation in different cultural environments has generated new research questions focusing on cultural and historical conditions, national accounting procedures and practical applications. National characteristics determine scope and form of new standard practical solutions. New trends in various economic environments and new informational needs of business shareholders have exposed new issues in financial reporting, e.g. human capital reporting or environmental reporting. These processes have focused attention on the roles of audits, ethical norms, shadow economics and/or professional education. These questions are the topics of accepted contributions presented at the conference sections.

In summary, contributions presented at the conference provide an interesting overview of the current state and current issues in financial and integrated reporting, harmonization of the IFRS adoption and effects of EU directive implementation in the context of national accounting standards.

We believe that the collection of conference contributions will promote the dissemination of knowledge, and will inspire further research and solutions to actual practical reporting problems.

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IFRS: GLOBAL RULES & LOCAL USE

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