INTERNATIONAL ACCOUNTING STANDARDS COMPLIANCE FACTORS: TWO EMPIRICAL RESEARCHES**

ABSTRACT

The paper presents the results of two different studies focused on the problem of corporate compliance with International Accounting Standards, searching for the factors influencing the International Accounting Standards Implementation. The problem of IASs implementation is the most important topic of the contemporary theory of international accounting due to globalization processes and pressures for achieving the accounting harmonization. There are many differences among institutional and other environmental factors presenting the barrier to reaching the harmonization goals, but there are also different enterprise’s own internal factors influencing the extent of compliance with a given set of international standards. This paper has identified some of the factors as the result of two separately performed researches that could be of some help to understanding of significant differences in IASs implementation among the enterprises, as well as over the countries.

JEL: M41

Key-words: international accounting standards, influencing factors, accounting harmonization

1. Introduction

The accounting harmonization is the process closely tied to the globalization process that strongly affects the contemporary theory of international accounting. The accounting scholars, as well as the practitioners and the accounting information users are intensively discussing the advantages and disadvantages of national versus international standards implementation in Europe and broader.

National standards undoubtedly meet the needs of local enterprises better than the international ones, considering the particularities of a given country - specific cultural, historical, political, social, legal, economic (particularly the type of the capital market and taxation system), and other factors that cause differences in financial reporting and accounting practices among countries (see more in: Choi, F. D. S, Mueller, G. G., 1992; Fritz, S., and Lammle, C., 2003; Lawrence, S., 1996; Mueller, G. G., Gernon, H., and Meek,

On the other hand, international accounting standards are supposed to be accepted worldwide, enabling comparability over countries, mutual understanding ability among stakeholders all round the world, contributing in such a way to smooth capital and goods flows without obstacles. General acceptance of international accounting standards is the ultimate goal of the accounting harmonisation processes that could be considered as a result of globalisation flows, but also at same time contributing to their development.

Croatia has experienced the implementation of International Accounting Standards from the early 1990s and in 2008 Croatian Accounting Standards are introduced by the new Accounting Act (Official Gazette 109/07) while only large and listed companies are obliged to implement International Financial Reporting Standards. The results presented in this paper were produced by the research performed in the period 2004-2006 when Croatian Accounting Standards were still not introduced. So, we have explored the International Accounting Standards implementation since they were in force, although, de iure, did not also mean de facto acceptance. We’ve limited the analysis on IASs implementation since the research comprised only Croatian SMEs that were not obliged to apply International Financial Reporting Standards. Furthermore, understanding the IASs implementation in SMEs is crucial for further phases in accounting systems development in the future, considering the option of eventually accepting the IASB’s IASs for SMEs (NPAEs) or UNCTAD’s guidelines for SMEs (SMEGA) that are also based on IASs. In the short-run, the results could also contribute to a better structuring of the national standards in order to make them more suitable to SMEs’ needs in comparison to the full body of international standards. The national standards are still expected to be in accordance with the international ones due to the harmonization processes across the EU and wider.

Actually, we cannot find the solution to reach harmonized financial reporting worldwide, without understanding the core of the problem: the reasons of better or worse compliance with a given set of International Accounting Standards. The environmental factors that have produced a number of accounting systems classifications (with Nobes’ among the most famous ones) over the last few decades help to understand the problem describing differences among the countries, but there are also some other features at the enterprise level, producing intra-country differences, or differences in IASs application among the enterprises in the same country (see more in: Archer, S., Delvaille, P., and McLeay, S. 1995).

Trying to understand the fore-mentioned differences in the IASs implementation in the real practice, many researches were performed. Here we present the part of results of our empirical study of IASs implementation in the sample of Croatian SMEs (2004-06) together with the Street and Gray's research (2002) performed on the international sample of companies in 2001, comprising their 1998 annual reports. They both search for influential factors on IASs compliance, but with different goals, as it will be explained later.

2. Factors of Influence on Corporate Compliance with IASs: Street, D.L. and Gray, S.J.’s Research

Street, D.L. and Gray, S.J. have performed a research sponsored by the Association of Chartered Certified Accountants in 2001 to assess the factors of compliance with International Accounting Standards worldwide, or, more precisely, the objective was “to examine the accounts of a worldwide sample of companies referring to the use of IAS to assess the extent of compliance/non-compliance in more detail and most importantly to identify key factors associated with compliance” (Street-Gray, 2002, p. 52). The research comprised 279 companies’ annual (1998) reports. It focused on two main research questions:
- “What are the key factors associated with the degree of compliance with IAS-required disclosures for companies that refer to IAS?
- “What are the key factors associated with the degree of compliance with IAS-required measurement and presentation practices for companies that refer to IAS?”.

They explored the relation between IAS compliance and the company’s listing status, size, profitability, industry, the manner in which companies refer to IASs in the accounting policies footnote, type of auditor, type of accounting standards used by the company, and type of audit standards adhered to, as stated in the audit report, country of domicile, multi-nationality and size of the home stock market. So, they've developed a set of hypotheses:

«H1. Compliance with mandatory-IAS disclosures and measurement/presentation requirements is associated with a company's listing status.
H2. Company size is positively associated with the degree of compliance with IAS-required disclosures and measurement/presentation requirements.
H3. Profitability is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H4. Industry is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H5. The manner in which companies refer to IAS in the accounting policies footnote is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H6. The type of auditor is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H7. The type of accounting standards used by the company, as stated in the audit report, is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H8. The type of audit standards adhered to, as stated in the audit report, is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H9. The country of domicile is associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H10. The extent of multi-nationality is positively associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements.
H11. Size of the home stock market is positively associated with the extent of compliance with IAS-required disclosures and measurement/presentation requirements. »

Significant positive association was found between IASs disclosure requirements compliance and being listed outside the home region - U.S. listing/filing and/or non-regional listing, being in the commerce and transportation industry, referring exclusively to the use of IASs, being audited by a (then) Big 5 + 2 firm (including BDO and Grant Thorton), and being domiciled in China or Switzerland while there was significant negative association with being domiciled in France, Germany or other Western European countries. They have also found significant positive association between IAS measurement and presentation standards compliance and exclusive reference to the use of IASs, being audited by a (then) Big 5 + 2 firm, being domiciled in China, and significant negative association with being domiciled in France or Africa.

3. Factors of Influence on IASs Implementation in Croatian SMEs
Street-Gray’s research was performed in order to provide “a more informed understanding of the factors influencing compliance/non-compliance that should assist the IASB, IFAC, and other interested parties such as the IFAD, in addressing problems hindering the worldwide acceptance of IAS” (Street-Gray, 2002, p. 72).

While Street-Gray’s research tried to identify the key factors associated with the degree of compliance with IASs for companies that refer to IAS to address the problems of reaching the worldwide acceptance of IASs, our research has also attempted to find the factors related to compliance with IASs but with a different goal. Our research comprised SMEs that were obliged to apply directly the full body of IASs under the former Croatian regulation, which was a heavy burden resulting in poor implementation of IASs in the real practice. There were a number of proposals to change such a situation by introducing national accounting standards, following the European Directives, accepting the IASB’s standards for SMEs once the project would be over, etc. The selection of the right solution needs an understanding of the IASs implementation in practice and that is why we’ve performed the empirical research among Croatian SMEs to identify the factors closely tied to real IASs implementation to contribute to the selection of the most convenient set of standards to be followed by Croatian SMEs.

3.1. Sample Description, Methods, Variable Definitions, Hypotheses

In the period December 2004 to July 2006, we performed the empirical analysis of accounting standards implementation in Croatian SMEs (Mošnja-Škare, L., 2006). The sample comprised of 430 companies with the rate of questionnaires’ return of 15%. These SMEs were selected randomly out of 64,057 SMEs throughout Croatia, hence there were no selection biases based on exclusions of any county, industry, type of ownership, profit range, date of establishment, etc (1). Questionnaires with some missing or controversial data were exempted from any further research. The questionnaire consisted of questions of a general type such as: the enterprise’s legal form, size, number of employees, total assets and annual turnover, relation to the business abroad, management function performance (separated or not from the owner) and then followed the set of questions on accounting function organization, financial reports’ users, the frequency of financial reports and accounting information use, cost-benefits consideration of accounting information preparation and use, accounting policies establishment, accrual or cash-based accounting preference and International Accounting Standards implementation standard by standard.

Table 1.

Sample Description – Croatian SMEs in 2004/06 by Features of Size, Number of Employees, Annual Turnover, Legal Form, Business Relations Abroad, Management Function Performance

<table>
<thead>
<tr>
<th>size (NN 90/92)</th>
<th>62% small enterprises</th>
<th>38% medium-sized enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>11-30</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>31-50</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>51-100</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>101-</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>annual turnover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 2 million euros</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>2-8 million euros</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>8 - million euros</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>legal form</td>
<td>85% limited liability companies</td>
<td>13% joint-stock companies</td>
</tr>
<tr>
<td></td>
<td>1% partnerships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1% limited partnerships</td>
<td>68% related to business abroad</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>business abroad (any relation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>owner=(≠)manager</td>
<td></td>
<td>75% owner performs the management function</td>
</tr>
</tbody>
</table>

Source: author’s research.

The method of logit regression was employed to estimate the probability of particular IAS implementation in the enterprises of certain features and accounting particularities that were considered as the potential variables of influence onto IASs application:

\[
\ln \left( \frac{Y}{1-Y} \right) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \epsilon_i
\]

\[
\text{Prob} \left( Y = 1 \right) = \frac{e^{\beta'X}}{1 + e^{\beta'X}} = \Lambda(\beta'X)
\]

**Dependent variable:** IAS – International Accounting Standard implementation:

1 IAS implemented
0 IAS not implemented

**Independent variables:**

- FORM – legal form:
  1 joint stock companies,
  0 limited liability companies and others.
- SIZE – enterprise’s size:
  1 middle-sized enterprise,
  0 small enterprise.
- NUMBEMPL – number of employees in a given enterprise.
- ABROAD – enterprise’s relation to any kind of business abroad:
  1 involved in business abroad,
  0 operating only on national market.
- MANAG – management function performance:
  1 owner doesn’t operate as manager in same time,
  0 owner is also a manager.
- ACCOUNT – accounting function organization:
  1 own accounting function inside the enterprise,
  0 accounting agency employed or owner is also accountant.
- EXTERNAL – the type of financial reports users:
  1 external users are principal financial reports users,
  0 management is principal financial report user.
- INTENSIT – the intensity of financial reports and accounting information use:
  1 ordinary use,
  0 occasional use.
- POLICY – the model of accounting policies creation and adoption:
  1 accounting policies established by management based on the accountants’ proposals,
  0 accounting policies formally approved by management.
- COSTBEN – cost-benefit aspect of accounting information preparation and use:
  1 costs are fairly offset by benefits,
  0 otherwise.
- BASIS – accounting basis preferred:
  1 accruals accounting,
  0 cash-based accounting.

We developed a set of hypotheses, as follows. The probability of International Accounting Standards implementation increases if:

- **(H1)** the enterprise is the joint stock company, in relation to other legal forms,
- **(H2)** the enterprise is middle-sized, in relation to small ones,
- **(H3)** the number of employees is higher,
- **(H4)** the enterprise is somehow related to the business abroad, in comparison to those operating exclusively on the national market,
• (H5) the management function is separated from the owners’, in relation to cases where the owner is also a manager,
• (H6) the enterprise has its own accounting organized inside the firm, in relation to those ones that have employed the accounting agency,
• (H7) the principal users of financial reports are external users, in relation to management as their principal user,
• (H8) the financial reports and other accounting information are regularly used in decision making processes instead of their occasional use,
• (H9) the accounting policies are created and adopted by management based on accountants’ proposal, in relation to their formal approval by management,
• (H10) costs of accounting information preparation are considered fairly offset by the benefits of their use, in comparison to the cases where such a relationship doesn’t exist,
• (H11) the enterprise prefers the accruals rather than cash-based accounting.

3.2. Results

The results of the logit regressions of IASs implementation in Croatian SMEs are stated below (table 2). Actually, we explored the application of condensed IASs into a set of 15 guidelines (drawn from 16 IASs) developed by UNCTAD-ISAR for Level 2 entities (4).

**IAS 1 - Presentation of Financial Statements**

The null hypothesis that ACCOUNT and COSTBEN coefficient are zero is rejected in favour of the alternative that they are positive, at a 5% significance level. An enterprise that doesn’t have its own accounting organized inside the firm, but employs the accounting agency, with “typical” characteristics of all variables in the model, has a probability of IAS 1 implementation of 0.82402, but if it has its own accounting, the probability increases to 0.97199. So, the marginal effect is 0.14797. Similarly, the probability of IAS 1 implementation increases by 0.14797 if the enterprise finds costs covered by benefits of accounting information use in relation to the enterprise which considers costs not fairly offset by the benefits. The enterprise with its own accounting organized inside the firm which understands the benefits of accounting information, meaning that it takes the accounting and financial reporting seriously and beneficially, is more likely to prepare its financial statements in accordance with IAS 1 requirements. Likelihood ratio test indicates that the null hypothesis that all slope coefficients are zero is rejected at a 1% significance level, so the estimated model is highly significant. McFadden likelihood ratio index (0.2400) also doesn’t equal 0 which would be the case if all the slope coefficients are 0. The model predicts 89% of the observations correctly, while the naïve model percentage of right predictions is 88%. So, the result suggests a good fit.

**IAS 2 - Inventories**

Variable ABROAD has a positive influence on IAS 2 implementation meaning that the entities which are more intensively involved in the business abroad are more likely to implement IAS 2, with the marginal effect of 0.30063. Such a result is probably related to trade as the prevailing industry among SMEs, usually related with imports of goods to be sold on the national market. Variable EXTERNAL has a negative sign, which implicates that the IAS 2 implementation is negatively related with the type of financial reports users. Where external users are considered to be the most important financial reports users, IAS 2 is less likely to be implemented, with the marginal effect of – 0.14062 indicating that the inventory policy is mostly under the field of internal users - management interest. For the BASIS coefficient, the null
hypothesis is accepted. At a 5% significance level, the null hypothesis that all slope coefficients are zero is rejected.

**IAS 7 – Cash Flow Statements**

Among all the variables in the model, only two of them are of significant positive influence on IAS 7 implementation – SIZE and INTENSIT. The probability of IAS 7 implementation increases for middle-sized in relation to small enterprises (small enterprises were not obliged to prepare cash flow statement in a given period of research) which also stands for more intensive, regular use of financial reports comparing to their occasional use (since regular users usually require the full set of statements). So, the marginal effect of SIZE is 0.27192 and INTENSIT 0.49715. According to the likelihood ratio test, the model coefficients are different than zero and the alternative hypothesis is accepted at 1% significance level.
### Table 2.

#### The Results of the Logit Regressions

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLES</th>
<th>IAS 1</th>
<th>IAS 2</th>
<th>IAS 7</th>
<th>IAS 8</th>
<th>IAS 10</th>
<th>IAS 12</th>
<th>IAS 16</th>
<th>IAS 17</th>
<th>IAS 18</th>
<th>IAS 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.45928</td>
<td>0.16337</td>
<td>-1.0211</td>
<td>-0.16887</td>
<td>-0.2431</td>
<td>1.2764</td>
<td>0.94490</td>
<td>-1.8870</td>
<td>1.3059</td>
<td>-2.5123</td>
</tr>
<tr>
<td>FORM</td>
<td>1.7199 (1.9616**)</td>
<td>2.3210 (2.0679**)</td>
<td>1.2764 (1.6634***)</td>
<td>-2.1214 (-2.0056**)</td>
<td>-1.8608 (-1.2540)</td>
<td>1.5678 (2.0975***)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.96285 (-1.3093)</td>
<td>-1.7526 (-2.4167**)</td>
<td>-3.7403 (-2.3864**)</td>
<td>-1.2144 (-1.7154***)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUMBEMPL</td>
<td>2.0031 (2.2908**)</td>
<td>-0.72167 (-0.77725)</td>
<td>0.86157 (0.95946)</td>
<td>1.5294 (2.3233**)</td>
<td>1.5243 (2.0663**)</td>
<td>2.8517 (2.5911*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABROAD</td>
<td>-1.421 (-1.7217***)</td>
<td>-0.82039 (-1.4780)</td>
<td>-0.95799 (-1.3754)</td>
<td>-1.2697 (-1.3918)</td>
<td>-1.4859 (-2.0033**)</td>
<td>-2.3310 (-1.7909***)</td>
<td></td>
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</tr>
<tr>
<td>INTENSIT</td>
<td>3.2913 (3.2572*)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>POLICY</td>
<td>2.0031 (2.2908**)</td>
<td>-0.43021 (-0.54059)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASIS</td>
<td>0.8731 (1.5123)</td>
<td>1.3745 (1.7624***)</td>
<td>1.3330 (1.6673***)</td>
<td>0.68420 (1.1757)</td>
<td>2.2758 (2.1621**)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McFadden R-Square</td>
<td>0.2400</td>
<td>0.10707</td>
<td>0.28065</td>
<td>0.083703</td>
<td>0.24216</td>
<td>0.18582</td>
<td>0.12699</td>
<td>0.082512</td>
<td>0.32481</td>
<td>0.086963</td>
</tr>
<tr>
<td>% of right predictions</td>
<td>89%</td>
<td>69%</td>
<td>80%</td>
<td>68%</td>
<td>82%</td>
<td>86%</td>
<td>75%</td>
<td>69%</td>
<td>89%</td>
<td>85%</td>
</tr>
</tbody>
</table>

* * significant at p-value < 0.01
** ** significant at p-value < 0.05
*** *** significant at p-value < 0.10
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>IAS 21</th>
<th>IAS 23</th>
<th>IAS 24</th>
<th>IAS 38</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.96002</td>
<td>-2.5290</td>
<td>-3.1020</td>
<td>-1.8487</td>
</tr>
<tr>
<td>FORM</td>
<td>1.5304</td>
<td>2.3392</td>
<td>(2.1996**)</td>
<td></td>
</tr>
<tr>
<td>(1.5989)</td>
<td></td>
<td>2.3392</td>
<td>(2.1996**)</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>2.0515</td>
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<td></td>
</tr>
<tr>
<td>NUMBEMPL</td>
<td>0.0087543</td>
<td></td>
<td></td>
<td>0.010646</td>
</tr>
<tr>
<td>(1.9230***))</td>
<td></td>
<td></td>
<td></td>
<td>(2.0687**)</td>
</tr>
<tr>
<td>ABROAD</td>
<td>-1.4474</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** significant at p-value &lt; 0.05</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MANAG</td>
<td>-1.2464</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(-1.2081)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCOUNT</td>
<td></td>
<td></td>
<td></td>
<td>2.4434</td>
</tr>
<tr>
<td>(-1.2081)</td>
<td></td>
<td></td>
<td></td>
<td>(2.6070*)</td>
</tr>
<tr>
<td>EXTERNAL</td>
<td>-1.4443</td>
<td>-1.9854</td>
<td>(-1.8340**)</td>
<td></td>
</tr>
<tr>
<td>(...-1.8464***)</td>
<td>(-1.8464**)</td>
<td>(-1.8340**)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTENSIT</td>
<td>-1.2604</td>
<td></td>
<td>(-1.8517***))</td>
<td></td>
</tr>
<tr>
<td>(-1.8517***))</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>POLICY</td>
<td>2.0193</td>
<td></td>
<td>-2.2314</td>
<td>(1.7037***)</td>
</tr>
<tr>
<td>(1.7037***)</td>
<td></td>
<td></td>
<td>(-2.2398**)</td>
<td></td>
</tr>
<tr>
<td>COSTBEN</td>
<td>1.1988</td>
<td></td>
<td>1.4361</td>
<td>(1.6175)</td>
</tr>
<tr>
<td>(1.6175)</td>
<td></td>
<td></td>
<td>(1.7116***)</td>
<td></td>
</tr>
<tr>
<td>BASIS</td>
<td></td>
<td></td>
<td>1.4194</td>
<td>(2.0465**)</td>
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<td>McFadden R-Square</td>
<td>0.081393</td>
<td>0.17701</td>
<td>0.37299</td>
<td>0.22189</td>
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<tr>
<td>% or right predictions</td>
<td>65%</td>
<td>86%</td>
<td>94%</td>
<td>71%</td>
</tr>
</tbody>
</table>

* significant at p-value < 0.01  
** significant at p-value < 0.05  
*** significant at p-value < 0.1
**IAS 8 - Accounting Policies, Changes in Accounting Estimates and Errors**

Only FORM coefficient is significantly positive meaning there is higher probability of IAS 8 implementation in joint stock companies than in limited liability companies and other types of ownership (marginal effect is 0.40388). This could be related to a more serious approach to the accounting function by joint stock companies, while most of the limited liability companies in the sample were small enterprises with the owner performing at same time the management function that usually considers the accounting function only as a costly burden. All the coefficients in the model do not equal zero and the alternative hypothesis is accepted at 5% significance level.

**IAS 10 - Events After the Balance Sheet Date**

In this model, there are four significant variables of influence on IAS 10 implementation. It’s positively correlated with FORM, and BASIS, while negatively correlated with ABROAD and MANAG. There’s more likelihood that IAS 10 will be implemented in joint stock companies comparing to limited liability companies and other types of ownership, with the marginal effect of 0.50649. There’s also higher probability that IAS 10 will be implemented in the enterprises that find accrual basis more convenient than cash basis with the marginal effect 0.12135. The results could be considered in line with the accounting development level in joint stock companies versus small limited liability companies that usually prefer cash-based accounting. On the other hand, hypotheses H4 and H5 are not accepted: It’s less likely that the enterprises involved in some type of business abroad will implement IAS 10 comparing to those oriented to national markets and the marginal effect is – 0.37233. In addition, the probability of its implementation decreases in the enterprises where the owner isn’t also a manager at the same time, in relation to owner-managed SMEs with marginal effect of -0.16604. The null hypothesis that the coefficients equal zero is rejected at 1% significance level.

**IAS 12 - Income Taxes**

Enterprise’s SIZE negatively influences the probability of IAS 12 implementation meaning there’s less probability of its application in medium-sized enterprises in relation to small ones with the marginal effect of -0.17557 (smaller enterprises were always particularly interested in tax savings). Also, BASIS coefficient is positively related to IAS 12 implementation meaning that enterprises voting for accruals accounting are more likely to implement IAS 12 in relation to enterprises that would like to replace the accruals by the cash basis of accounting (the marginal effect is 0.075202). The result is consistent with other IASs’ higher degree of implementation in case of accruals preference. Likelihood ratio test indicates that the null hypothesis that all slope coefficients are zero is rejected at a 10% significance level.

**IAS 16 - Property, Plant and Equipment**

According to the likelihood ratio test, the model is highly significant (1% significance level), coefficients are different than zero. ACCOUNT coefficient is positive indicating that IAS 16 has higher probability of implementation in enterprises with their own accounting function organized inside the firm in relation to those which employed the accounting agency or where the owner also operates as the accountant (marginal effect is 0.36082). While this result is consistent with higher compliance also with other IASs in case of accounting function developed inside the enterprise, another hypothesis H7 is not accepted. The negative sign of EXTERNAL coefficient indicates there’s less probability of IAS 16 implementation if the external users are
the principal users of financial reports in relation to management as their primary user (the marginal effect -0.19355).

**IAS 17 – Leases**

The likelihood ratio test indicates that the null hypothesis that all the coefficients are zero is rejected at 10% significance level, so there are two variables of significant influence onto IAS 17 implementation in the model: MANAG and ACCOUNT. Consistently to previous explanations, the probability of IAS 17 implementation increases if the enterprise has its own accounting organized inside the firm in comparison to employing the accounting agency (marginal effect 0.34873). Hypothesis H5 is not accepted since compliance with IAS 17 decreases in cases where the owner doesn’t perform the management function at the same time compared to owner-managed SMEs (marginal effect -0.28918).

**IAS 18 – Revenue**

The null hypothesis that all coefficients are zero in the model is rejected at 1% significance level. ACCOUNT is positively related with the probability of IAS 18 implementation meaning that it increases if the enterprise has its own accounting organized inside the firm in relation to those ones that have employed accounting agency or the owner operates also as the accountant (marginal effect 0.20631), which is a relation confirmed also for other IASs. The variable EXTERNAL is negatively related to IAS 18 implementation since the probability of its application decreases in case the external users are principal financial reports users in relation to the situation where management is the primary user (marginal effect 0.014660), which makes hypothesis H7 unacceptable. Variable BASIS is positively associated with IAS 18 implementation raising its probability of application if the enterprise would rather keep the accrual basis of accounting than replace it by cash basis of accounting (marginal effect 0.12238), which is also confirmed in case of other IASs.

**IAS 20 - Accounting for Government Grants and Disclosure of Government Assistance**

There’s only one variable – SIZE with significant influence on the probability of IAS 20 implementation. It’s positively related with IAS 20 implementation, so there’s higher probability that it will be applied if the enterprise is of middle rather than of small size with the marginal effect of 0.20500 (since middle enterprises are more likely to enter into government grants programmes than smaller entities).

**IAS 21 - The Effects of Changes in Foreign Exchange Rates**

Variable NUMBEMPL is positively associated with IAS 21 implementation with a marginal effect of 0.002 (this variable is a proxy for enterprise’s size, implicating better compliance with IAS in larger SMEs). Contrary to the expectations, variable INTENSIT decreases the probability of IAS 21 implementation (marginal effect -0.30505) in case financial reports are used regularly in relation to their occasional use. Such a relation would not be acceptable at lower significance levels. Likelihood ratio test indicates that coefficients are different than zero (significance level 10%).
**IAS 23 - Borrowing Costs**

At 5% significance level, the null hypothesis that all coefficients are zero is rejected. Where principal financial reports’ users are external users, there’s less probability of IAS 23 implementation with the marginal effect of variable EXTERNAL of -0.25115, so hypothesis H7 isn’t accepted. POLICY coefficient is positively associated with IAS 23 implementation increasing the probability of its application (marginal effect 0.10565) in case the accounting policies are actively set by the management based on the accountants’ proposal, in relation to the cases of just formal management’s approval. If more attention is paid to accounting policies development, it is expected this also stands for the accounting treatment of borrowing costs.

**IAS 24 - Related Party Disclosures**

The alternative hypothesis that coefficients are different than zero is accepted at 1% significance level. The variable FORM is positively associated with IAS 24 implementation, making its probability higher for joint stock companies in relation to limited liability companies, with the marginal effect of 0.054052. This positive relation stands also for variable SIZE, so there’s higher probability of IAS 24 application in middle-sized enterprises in relation to small ones, with the marginal effect of 0.039694. Both results are expected considering the type of enterprises that are more likely to enter in this kind of transactions, and those are usually larger SMEs - joint stock companies. The variable EXTERNAL has a negative coefficient decreasing the probability of IAS 24 implementation if external users are principal users of financial reports in relation to their primary use for management purposes (marginal effect -0.03688), so H7 is again unacceptable.

**IAS 38 - Intangible Assets**

At 1% significance level, the hypothesis that all coefficients are zero is rejected. All of 6 variables in the model significantly influence the IAS 38 implementation where variables NUMBEMPL, ACCOUNT, COSTBEN and BASIS are positively associated with it, while variables ABROAD and POLICY decrease the probability of its application. In other words, the probability of IAS 38 implementation increases as the number of employees grows (with the marginal effect of 0.003); in cases where the enterprise has organized its own accounting function inside the firm, in relation to those who employed the accounting agency (marginal effect 0.45952); for enterprises that find the costs of accounting information fairly offset by the benefits of its use, in comparison to the opposite relation (marginal effect 0.32721); and also for enterprises which would rather keep than replace the accrual basis of accounting by cash-based accounting (marginal effect 0.32423). All of these positively related factors are also previously confirmed for other IASs. On the other hand, the probability of IAS 38 implementation decreases if the enterprise is involved in some kind of business abroad in relation to those operating exclusively on the national market (marginal effect -0.28471); if the accounting policies are chosen by management in comparison to those ones only formally approved (marginal effect -0.36323). IAS 38 requires costing rather than capitalization of costs such as foundation costs or research costs that reflects the financial result that management is responsible for. Most of the entities with developed relations to business abroad, were in this group of enterprises with active management in accounting policies structuring.

The previously explained logit models outputs are summarized below in a review of hypotheses H1-H11 as they were accepted in relation to individual standards. For IAS 36 and 37, no relationship with potential variables of influence was proved, so none of hypotheses was accepted.
Final Results: the List of Hypotheses Accepted

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>IAS</th>
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<tbody>
<tr>
<td>H1</td>
<td>IAS 8, IAS 10, IAS 24</td>
</tr>
<tr>
<td>H2</td>
<td>IAS 7, IAS 20, IAS 24</td>
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<tr>
<td>H4</td>
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<td>H6</td>
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<td>H8</td>
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<td>H9</td>
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<tr>
<td>H10</td>
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<tr>
<td>H11</td>
<td>IAS 10, IAS 12, IAS 18, IAS 38</td>
</tr>
</tbody>
</table>

4. Conclusions

The results of the research presented in the previous paragraph have confirmed 9 out of 11 hypotheses (except H5 and H7). Two variables: management function (not) performed by owner (H5) and the type of financial reports users (H7) had significant, but negative influence, which was explained by owners acting more like insiders than outsiders (in case of widespread ownership) which were considered to be the most important SMEs financial reports’ users, followed by the government, instead of potential investors, shareholders – owners outside the enterprise as typical external users interested in IASs implementation. Some variables (INTENSIT, ABROAD, POLICY, SIZE) turned their sign of positive influence on particular standards application into the negative influence for other standards implementation.

Although performed at different levels (international and national), different periods (1998 and 2004/06), with companies of all size sampled by the former, and only SMEs sampled by the latter study, both researches tried to identify the factors influencing the compliance with International Accounting Standards but with different goals. The former research proved the significant influence of the enterprise’s listing status, type of industry, reference to the use of IAS, being audited by a Big (then) 5+2 firm and country of domicile in order to help the international bodies to better understand the obstacles of wider IASs acceptance. The latter research, that comprised smaller entities has proved the influence of enterprise’s legal form, size, number of employees, its relations to business abroad, accounting function organization, the intensity of accounting information use, the model of accounting policy creation and adoption, perceived cost-benefit aspect of accounting information preparation and use and the accounting basis preferred on the compliance with IASs, in order to contribute to selection or structuring the set of standards most feasible to the needs of Croatian SMEs.

The poorest compliance with IASs was related to the smallest limited liability companies, without an accounting function organized inside the enterprise, with the owner operating also as a manager without interest to participate in accounting policies creation or to use the accounting information regularly in decision making, considering accounting information more costly than beneficial and preferring cash-based accounting. The results imply that, for this group of entities, even the simplified and modified IASs would probably still not be appropriate. So, the IASB’s standards for SMEs or national standards structured in accordance with IASs could be suitable for the entities that don’t drop to this group which could probably more readily accept some simple proposals like UNCTAD-ISAR’s Level 3 Guidelines. Of course, these considerations can only serve as implications for further and broader researches.
Endnotes
1 With a given population size, the sample size needed at 90% confidence level and 10% confidence interval (tolerable error), even with the most conservative choice of 50% proportion (response distribution) would be 68 entities; with 60% response distribution would be exactly 65 entities (as it is our actual sample size).
2 Studenmund, A.H., 2001, 442.

REFERENCES


Fritz, S., and Lammle, C., (2003), The International Harmonisation Process of Accounting Standards, Avdelning, Institution Division, Department, Ekonomiska Institutionen LINKÖPING.


ČIMBENICI USKLAĐIVANJA MEĐUNARODNIH RAČUNOVODSTVENIH STANARDA: DVA EMPIRIJSKA ISTRAŽIVANJA

SAŽETAK

U radu su prezentirani rezultati dvaju istraživanja usmjerenih na problem prihvaćanja Međunarodnih računovodstvenih standarda te čimbenika koji utječu na njihovu implementaciju. To je jedno od najznačajnijih područja suvremene teorije međunarodnog računovodstva zahvaljujući globalizacijskim procesima i pritiscima u pravcu postizanja računovodstvene harmoniziranosti diljem svijeta. Mnoge su različitosti u institucionalnim i drugim elementima okruženja koje predstavljaju prepreku dostizanju harmonizacijskih ciljeva, ali također postoje i interni čimbenici pri poslovnim subjektima koji utječu na usklađenost sa međunarodnim standardima. Ovaj rad ukazuje na neke od njih, koji proizlaze iz dvaju odvojenih, neovisnih istraživanja, u namjeri da pridonesu razumijevanju značajnih razlika u implementaciji Međunarodnih računovodstvenih standarda među poslovnim subjektima, kao i među zemljama.

JEL: M41

Ključne riječi: međunarodni računovodstveni standardi, utjecajni čimbenici, računovodstvena harmonizacija