

Voluntary disclosure of financial information on the internet by large companies in Slovenia

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Abstract

Purpose – The purpose of this research was to examine the impact of the determinants and characteristics of voluntary internet financial disclosures by large companies in Slovenia. With this research, the authors wanted to determine the factors which impact on the differences between companies that use internet financial reporting and those that do not.

Design/methodology/approach – The research was conducted on a sample of large companies in Slovenia ($n = 192$), which was divided into two groups, depending on whether they use internet financial reporting. A binary logistic regression was undertaken to assess whether voluntary disclosure of financial information on the internet was related to the company's size, profitability, age, company's legal form, ownership dispersion and industry sector.

Findings – The research has shown that there is a statistically significant difference between the companies which use or do not use internet financial reporting. The likelihood that the companies will publish the internet financial information is greater in the case of public limited companies, companies that deal with the financial, energy or ICT sectors and companies that have a larger ownership concentration.

Originality/value – This is one of the first studies in Slovenia that was used to determine the factors according to which the companies that use internet financial reporting differentiate from those that do not.

Keywords Slovenia, Logistic regression, Voluntary disclosures, Internet financial reporting

Paper type Research paper

1. Introduction

Around the 1990s, the internet surfaced as an alternative communication platform for dissemination of information among corporate companies all over the world. The widespread adoption of the internet has resulted in an increasing number of companies around the world using it to disclose financial information (Siala *et al.*, 2014). Financial reporting developed in the early twenty-first century from the traditional design of the printed Annual Report to the contemporary Internet Financial Reporting (IFR)[1], aiming specifically at satisfying varying users' needs (Al-Htaybat *et al.*, 2011; Khan and Ismail, 2012). With the rapid development and ever more widespread use of the internet, companies have acquired a very effective communication tool for the presentation of vital information to investors and other stakeholders. Bollen *et al.* (2006) suggest that the primary objective of IFR should be to provide investors with financial information to make capital allocation decisions. The benefits of the internet for communicating information to investors over traditional communication channels are related substantially to the possibility of disseminating more information less expensively and in a more timely fashion, and to its



interactive nature. One of the more interesting features of the internet is that it allows companies to provide information targeted at different stakeholders and to obtain feedback from them (Branco and Rodrigues, 2006). These characteristics have made financial reporting on the internet the usual practice of the corporate sector in developed countries (Pervan, 2006) and, in the past few years, also in developing countries (Mohamed and Basuony, 2015). Voluntary disclosure of financial information plays an important role in individual and corporate decision-making (Elsayed and Hoque, 2010). In the most simple way, we can define voluntary disclosure as “free choices on the part of company managements to provide accounting and other information deemed relevant to the decision needs of users of their Annual Reports” (Meek *et al.*, 1995). Otherwise, the internet has become one of investors’ most frequently used sources of information, and many companies are now reporting all or part of their financial information on their websites (Hindi and Rich, 2010).

Despite the growing use of the internet as a medium for the dissemination of financial information, some companies either do not have a corporate website or are not using their website to disseminate such information. The past two decades have seen a lot of research being carried out on the significance, method and quality of IFR. A similar research was already done in 2014 (Dolinšek *et al.*, 2014b). However, a smaller number of studies can be noticed relating to the differences between companies using the IFR (IFR companies) and companies not using the IFR (NIFR companies). Therefore, the purpose of this article is to use the example of large Slovenian companies as a basis, and determine the proportion of companies that use websites for the voluntary disclosures of financial information and discover the factors that separate the IFR companies from the NIFR companies. In the case of this research, the sample has been extended also to companies which do not use the IFR, while the logistic regression will be used to determine the factors according to which both groups of companies differentiate between each other.

The research was focused solely on the examination of companies using IFR, while the users’ points of view were not taken into account. Nevertheless, this perspective of examination is also very important, as the potential users are all the people who have access to the internet. According to the Internet World Stat data, there were 3.7 billion internet users in 2016 (www.internetworldstats.com/stats.htm). Of course, the investors (current and future) are found primarily among the users of IFR, followed by financiers, suppliers, customers, employees, competitors and communities. Some research refers to the significance of accounting information disclosed on websites for various stakeholders. In this case, the researchers were assessing the perceptions of accountants, auditors (Xiao *et al.*, 2002) and managers in medium-sized companies (Gowthorpe, 2004; Smith and Pierce, 2005) through interviews and surveys. Ali Khan and Ismail established that the users emphasised three advantages of the IFR: increases timeliness and efficiency in obtaining financial information, provides information for companies inexpensively and provides accessibility to the users. On the other hand, security problems and cost and expertise are the disadvantages of placing financial information on the internet (Ali Khan and Ismail, 2012). Moreover, one disadvantage can also be seen in the fact that the IFR companies also risk giving the disclosures to their competitors, who have access to detailed information on their performance. In the research focused on the Slovenian IFR users, the authors establish that users mostly want contents that help them assess the financial status of a company: for instance, the Annual Report, Profit and Loss Account, Balance Sheet, Rating Reports and reports on financial management. As less important, they evaluated reports on sustainable development, reports on corporate governance, accounting information in a foreign language and information on trends in shares and dividends (Dolinšek *et al.*, 2014a).

2. Literature review

The theoretical background of IFR may be explained using different theories, which are classified into two groups. The first includes theories used primarily to interpret the impact of different factors (company size, profitability, age, industrial sector, ownership concentration, etc.) on IFR. Among them are the signalling theory and certain theories within the corporate management, such as the agency and legitimacy theories. The second includes theories and models that apply either to the expectations of the users regarding the content of accounting information (stakeholder theory) or to their acceptance of novelties, enabled by the World Wide Web at forwarding this information (the TAM model and innovation diffusion theory). As we limited the research solely to the factors influencing IFR, the theories from the first group will be presented below.

2.1 Agency theory

Agency theory is concerned with the problem of interest conflicts arising from the separation of the ownership and control of a company. The key agency problem is between the controlling owner-management and the outside shareholders (Jensen and Meckling, 1976). If managers do not act on behalf of their shareholders, but try to further their own interests, this may lead to agency costs, such as the decline in the value of the company and monitoring costs to supervise the management (Marston and Polei, 2004). Watson *et al.* (2002) stated that managers have incentives to increase disclosure to convince shareholders that they are acting optimally because they know that shareholders seek to control their behaviour through bonding and monitoring activities. Berle and Means (1932) argued that, when shareholders are not able to monitor managers, corporate assets can be used for the benefit of the manager rather than for maximising shareholder wealth. Agency costs tend to increase with company size because larger companies have a higher information asymmetry between managers and shareholders. To reduce agency costs, larger companies tend to disclose more information than smaller companies (Al-Shammari, 2007). Therefore, one way of reducing agency costs is to increase the amount of information included in the accounting reports (Marston and Shrivs, 1996; Aly, 2008). In connection with this theory, the first hypothesis was developed:

- H1. There is a positive association between company size and the voluntary disclosure of financial information on the internet.

Previous research has shown a positive correlation between company size and the internet financial information disclosure (Marston and Leow, 1998; Craven and Marston, 1999; Pirchegger and Wagenhofer, 1999; Ettredge *et al.*, 2001; Debceny *et al.*, 2002; Larran and Giner, 2002; Allam and Lymer, 2003; Oyelere *et al.*, 2003; Xiao *et al.*, 2004; Bollen *et al.*, 2006; Al-Shammari, 2007; Trabelsi *et al.*, 2008; Damaso and Lourenço, 2011; Siala *et al.*, 2014; Dyczkowska, 2014; Mohamed and Basuony, 2015). However, such a correlation was not established in the research performed by Marston (2003) and Agyei-Mensah (2012).

2.2 Signalling theory

The signalling theory was developed mainly by Spence (1974) to explain behaviour in the labour markets; however, it may also be applied to other fields, such as strategic management, entrepreneurship, human resource management and IFR. The signalling theory is useful for describing behaviour when two parties have access to different information. Typically, one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal (Connelly *et al.*, 2011). Basically, the theory is similar to the agency

theory in that it recognises separation of ownership and control in modern corporations and suggests that market pressures on management will motivate management to disclose all information material to investors (Ross, 1979). Ross (1979) argued that companies with no information or bad news also have to signal, just like those with good news, to distinguish their companies from others.

The signalling theory explains the impact of profitability, age and industry branch on IFR. Companies will try to adopt the same level of disclosure as other companies within the same industry because, if a company does not keep up with the same level of disclosure as others, it may be perceived by stakeholders to be hiding bad news (Bogdan *et al.*, 2009). In terms of accounting policy choice, the signalling theory predicts that higher quality companies will choose accounting policies which allow their superior quality to be revealed, while lower quality companies will choose accounting methods which attempt to hide their poor quality. The difference between the higher quality and lower quality companies is seen mainly in the quantity and type of information disclosed by the management.

The signalling theory might be used to predict that higher quality companies will use the internet to disseminate "old" accounting information. Lower quality companies might want to maintain a lower profile and restrict access to accounting information to the more determined users. The very use of the internet might itself be a signal of high quality. It implies that the company is modern and up to date, with the latest technology rather than old fashioned and conservative (Marston and Leow, 1998). Managers of profitable companies increase the level of disclosure to signal to investors that the company is profitable, and to support their continuation and compensation (Oyelere *et al.*, 2003). Prior research examined the association between profitability and the extent of voluntary disclosure: However, the results are inconsistent, as shown below.

H2. There is a positive association between company profitability and the voluntary disclosure of financial information on the internet.

Marston (2003), Marston and Polei (2004), Al-Shammari (2007), Damaso and Lourenço (2011) and Mohamed and Basuony (2015) have established there is no correlation between profitability and IFR. The research performed by Xiao *et al.* (2004) and Trabelsi *et al.* (2008) established a negative correlation, while the research performed by Pervan (2006), Al-Moghawli (2009), Homayoun and Rahman (2010) established a positive correlation between profitability and IFR. The signalling theory can explain the impact of age on the disclosure of financial information. Older companies are more likely to have established reporting systems, meaning that full disclosure is less costly for them. Owusu-Ansah (1998) argued that a younger company may suffer a greater competitive disadvantage if it discloses certain items, such as information on research and development expenditure, capital expenditure and new products. The competitive disadvantage would arise when the information disclosed by the younger company was used to its detriment by others. If the cost of entering a market is high, then a company will be eager to disclose more, as its market position will not be endangered. In the opposite situation, companies may avoid revealing too much information for fear of products' or business processes' imitation.

Older companies may be more motivated to disclose such information, as the disclosure is less likely to hurt their competitive position. Accordingly, as IFR is a mechanism of voluntary disclosure, it is predicted that older companies are more likely to adopt it (Al-Shammari, 2007).

H3. There is a positive association between the age of a company and the voluntary disclosure of financial information on the internet.

This hypothesis was tested in their research by [Al-Shayeb \(2003\)](#), [Al-Shammari \(2007\)](#), [Umoren and Asogwa \(2013\)](#), though they established no correlation between IFR and company age, while a positive correlation was established by [Haniffa and Cooke \(2002\)](#) and [Akhtaruddin \(2005\)](#).

2.3 Corporate governance

Corporate governance is the system of rules, practices and processes by which a company is directed and controlled. Corporate governance essentially involves balancing the interests of the many stakeholders in a company – these include its shareholders, management, customers, suppliers, financiers, government and the community. It can be assumed that these stakeholders will use the internet to gather company-specific information because data from other sources are more difficult to obtain ([Marston and Polei, 2004](#)). Presenting their financial reporting on the internet is, perhaps, a mechanism by which the company might disclose more information to reduce agency costs ([Kelton and Yang, 2008](#)). These costs can be reduced by a monitoring system which encourages managers to make their actions more transparent by disclosing more information voluntarily so as to reduce the divergences of interests ([Siala et al., 2014](#)). In Slovenia, large firms usually have the form of Public Limited Companies and limited liability companies. Generally, the ownership of Public Limited Companies is more dispersed than that of limited liability companies. Investors who own only a small percentage of shares in a company have limited access to information about the enterprise. In addition to that, Public Limited Companies (Listed Companies especially) are obliged to disclose more information on their websites than, on the other hand, the limited liability companies, because of stricter regulations. Therefore, it is expected that Public Limited Companies will disclose their information to a greater extent in comparison to the limited liability companies. This having been said, the research included also the legal form of the companies (as a dummy variable), and that is a factor that has not been taken into account in any other research so far. Namely, the foreign studies are based only on the Public Limited Companies.

Our objective was to ascertain how the company's legal form (Public Limited and limited liability companies) and, consequently, the ownership structure impact the disclosure of financial information online. Two hypotheses were determined:

- H4. There is an association between a company's legal form and the voluntary disclosure of financial information on the internet.
- H5. There is a positive association between ownership dispersion and the voluntary disclosure of financial information on the internet.

Numerous studies have established the correlation between the disclosures of financial information online and ownership dispersion. Companies with a lesser ownership are less motivated to disclose financial information in comparison to companies with greater ownership dispersion ([Al-Shammari, 2007](#)). Namely, [Pirchegger and Wagenhofer \(1999\)](#), [Oyelere et al. \(2003\)](#), [Marston and Polei \(2004\)](#), [Abdelsalam et al. \(2007\)](#), [Al-Moghawli \(2009\)](#) and [Siala et al. \(2014\)](#) established a positive correlation between ownership dispersion and the IFR index, while [Ashbaugh et al. \(1999\)](#), [Xiao et al. \(2004\)](#) and [Al-Shammari \(2007\)](#) failed to establish such a correlation.

2.4 Legitimacy theory

The legitimacy theory is defined as "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed systems of

norms, values, beliefs and definitions” (Suchman, 1995). The Legitimacy theory explains that external factors influence corporate management so that it seeks to legitimise its activities (Al-Motrafi, 2008). The Legitimacy theory predicts that voluntary disclosure will vary with different corporate characteristics, such as size, performance, industrial sector and listing status. For example, Clarke and Gibson-Sweet (1999) stated that managers of bigger companies and firms in specific sectors with a high public presence use their Annual Reports to disclose more and higher quality information to capitalise their investments in the community (Al-Motrafi, 2008). The impact of the sector on the disclosure of financial information online may also be interpreted using the Signalling theory. Companies will try to adopt the same level of disclosure as other companies within the same sector because, if a company does not keep up with the same level of disclosure as others, it may be perceived by stakeholders that it is hiding bad news (Craven and Marston, 1999).

It is understood that the companies in industries with advanced IT technology and intellectual capital (for example, computer companies and companies from the field of Information Activity and Electronics) are more subjected to the influences from the environment and must, therefore, respond quickly to the possible changes from the environment. On the other hand, their business activity is connected with Information Technology, because of which they are also more susceptible to the adoption of novelties in the field of the IFR. In addition to that, it is also assumed that such a connection will also show itself in the case of the financial industry. In connection with this theory, the following hypothesis was developed:

- H6. There is an association between the industry sector and the voluntary disclosure of financial information on the internet.

Findings regarding the correlation between the sector and IFR differ vastly. Certain authors have managed to establish a statistically significant correlation: Marston and Shrive (1996), Gowthorpe and Amat (1999), Brennan and Hourigan (1999), Ettredge *et al.* (2001), Oyelere *et al.* (2003), Xiao *et al.* (2004), Al-Htaybat and Napier (2006), Al-Shammari (2007), Gandia (2008), while Marston and Leow (1998), Craven and Marston (1999), Marston (2003), Homayoun and Rahman (2010) and Dyczkowska (2014) failed to establish such a correlation.

3. Sample description and methodology

This research includes every large company in Slovenia ($n = 192$) which meets two of the following criteria used to define large companies in Slovenia: the number of employees (more than 250), total assets (exceeding €17.5m) and total income (more than €35m). It was found that 110 (57.29 per cent) companies publish financial information on their websites (IFR companies), whereas, on the other hand, 82 (42.71 per cent) do not publish them (NIFR companies). When evaluating the IFR companies ($n = 110$), we tried to determine whether a company fulfils one of the 50 elements of evaluation, 32 of which relate to the content (IFR-content), while 18 concern the manner of presentation (IFR-presentation). In the case of the IFR-content, we evaluated the typical financial information (Financial Statements, Annual Reports, interim reports, financial ratios, etc.), as well as non-financial information (sustainable development, corporate governance, Operations Report, etc.), while the IFR-presentation evaluation included mostly the manners of presentation offered by the World Wide Web and a traditional, paper-based financial reporting was not possible. We used a dichotomic way of evaluation, in which we added to an element that was present on the website value 1, and otherwise, the value 0. The sum of all elements gave us the IFR indicator (IFR index), which shows the degree of IFR for individual companies. A similar

form of evaluation was also used by the other studies (Pirchegger and Wagenhofer, 1999; Xiao *et al.*, 2004; Marston and Polei, 2004; Pervan, 2006; Bollen *et al.*, 2006; Al-Shammari, 2007; Trabelsi *et al.*, 2008, Damaso and Lourenço, 2011). The descriptive statistics on every element of evaluation of the IFR-content and IFR-presentation are indicated in Table I.

In continuation of the research, the sample was also extended to the companies ($n = 82$) that do not publish their financial information on websites (NIFR companies).

These two groups of companies presented a dependent variable (binary encoding) in the research. Binary logistic regression was undertaken to assess whether voluntary disclosure of financial information on the internet was related to a company's size, profitability, age, the company's legal form, ownership concentration and industry sector (independent variables). Data collection was conducted in October 2015 and was processed using SPSS.20.

The purpose of the research was to determine the factors which separate the IFR companies from the NIFR companies. For this research, the dependent variable was classified as a binary choice between an IFR company and an NIFR company. Logistic analyses enabled us to investigate the probability of an event's occurrence in relation to a number of measurable independent variables with the estimation allowing us to compare the relative importance of these variables (Field, 2009). The list of dependent and independent variables is shown in Table II.

4. Research results

4.1 Descriptive statistics of IFR companies and NIFR companies

The descriptive statistics of the independent variables for both groups of companies are shown in Table III. For the variables that measure the company's size (employees, income and assets) and age, the average values are higher in the IFR companies. For the ownership concentration and the variables that measure the company's profitability (return on equity, return on assets and return on sales), the situation is just the opposite, as the NIFR companies achieved higher values. The IFR companies had an average of 949 employees, income of EUR182m and total assets' value of EUR763m. In addition to that, they were 64 years old on average, while all three indicators of profitability were negative. On the other hand, the NIFR companies had an average of 589 employees, income of EUR79m and total assets' value of EUR70m. On average, such companies were 47 years old, had a larger ownership concentration and were profitable. The Table does not include the variables "Status" and "Industry Sector", as they belong to the group of descriptive variables. There were 85 per cent of Public Limited Companies among the IFR companies and 42 per cent of Public Limited Companies among the NIFR companies. Moreover, there were 98 per cent of the IFR companies from the fields of the Financial Sector, Energetics and ICT.

4.2 Binary logistic regression

A binary logistic regression analysis was used to examine the association between the dependent variable and independent variables (company characteristics). Table IV displays the results of the logistic regression analysis. We selected a forward method of regression with adding independent variables to a baseline model (which includes only the constant). By using this method, four models were established, while only the final one (full model) was presented which incorporated four independent variables. The full model ($-2LL = 153.30$) was an improvement over the baseline model ($-2LL = 262.07$). The baseline model predicted 57.3 per cent of cases correctly, while the full model predicted 88.0 per cent of cases correctly, which also indicates an improvement over the baseline model. The Hosmer and Lemeshow Test ($chi-square = 22.93$; $df = 8$; $p = 0.000$) indicated that the full model was a good fit.

IFR-content	No.	(%)
Balance sheet	109	99.09
Profit and loss statement	109	99.09
Annual report	106	96.36
Cash flow statement	105	95.45
Capital flow statement	104	94.55
Auditor's report	104	94.55
Financial notes	99	90.00
Accounting policies	97	88.18
Financial risk reporting	89	80.91
Comprehensive income statement	83	75.45
Financial ratios	78	70.91
Business analysis	78	70.91
Sustainable development	73	66.36
Financial summary	70	63.64
Financing and investments reporting	70	63.64
Annual report in a foreign language	69	62.73
Reporting format – PDF	110	100.00
Downloading and printing	108	98.18
Printing	108	98.18
Annual report search engine	107	97.27
Website search engine	94	85.45
Information currency	91	82.73
Annual report graphic design	75	68.18
Financial information access	40	36.36
Separate financial report	20	18.18
Annual reports for previous periods	66	60.00
General meeting information	56	50.91
Public investor publications	52	47.27
Corporate governance	48	43.64
Reporting by segments	44	40.00
Financial information in a foreign language	44	40.00
Ownership structure	44	40.00
Interim reports	32	29.09
Financial operations reporting	28	25.45
Shares data	27	24.55
Financial indicator notes	25	22.73
Financial calendar	25	22.73
Operations report	25	22.73
Investor contacts	19	17.27
Dividends data	15	13.64
Investor e-news	4	3.64
Browsing by category	17	15.45
Other design elements (backgrounds, music, mobile applications etc.)	17	15.45
Annual report online browsing	15	13.64
Reporting format – HTML	10	9.09
Business operations graphical representations	9	8.18
Interactive annual report	9	8.18
Further processing option	8	7.27
Multimedia presentation	8	7.27
Reporting format – XBRL	0	0.00

Table I.
IFR-content and IFR-
presentation
descriptive statistics

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47,3

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Table II.
The list of variables

Variables	Indicator	Measuring
<i>Dependent</i> IFR	Internet financial reporting (financial information on the company's website)	Dummy (1 = IFR company, 0 = NIFR company)
<i>Independent</i> Size	Number of employees Assets (in thousands of €) Income (in thousands of €)	Average number of employees Assets on 31 December Net turnover
Profitability	ROE ROA ROS	Return on equity Return on assets Return on sales
Legal form of company	Status	Dummy (1 = Public Limited Company, 0 = Private limited company)
Dispersion of ownership	Ownership concentration	Ownership shares of 10 largest owners
Industry sector	Sector	Dummy (1 = Financial sector, Energetics and ICT; 0 = Other)
Age	Company age	Company age in years

Table III.
Descriptive statistics
of the independent
variables for both
company groups

	Mean	SD	SE
<i>Number of employees</i>			
IFR companies	949.28	1,616.91	154.17
NIFR companies	588.93	575.76	63.58
<i>Income (in thousands of €)</i>			
IFR companies	182,066.15	333,195.99	31,768.99
NIFR companies	79,192.61	116,915.87	12,911.20
<i>Assets (in thousands of €)</i>			
IFR companies	762,994.49	1,769,973.36	168,760.34
NIFR companies	69,562.20	99,921.59	11,034.49
<i>ROE</i>			
IFR companies	-0.02	35.54	3.39
NIFR companies	8.12	58.48	6.46
<i>ROA</i>			
IFR companies	-0.39	10.03	0.96
NIFR companies	0.91	6.36	0.70
<i>ROS</i>			
IFR companies	-17.63	104.69	9.98
NIFR companies	0.02	8.00	0.88
<i>Ownership concentration</i>			
IFR companies	86.53	15.23	1.45
NIFR companies	98.44	11.32	1.25
<i>Company age</i>			
IFR companies	63.62	50.61	4.83
NIFR companies	46.57	36.72	4.05

Based on the logistic regression analysis results, it is evident that, out of the ten variables included in the model, four may be considered statistically significant, namely, legal form of the company ($Wald = 11.309$; $p = 0.001$), number of employees ($Wald = 4.534$; $p = 0.033$), ownership concentration ($Wald = 13.243$; $p = 0.000$) and industrial sector ($Wald = 25.375$; $p = 0.000$). All other variables showed an insignificant effect on the IFR. We noticed that the full model was significant overall ($chi-square = 108.77$; $p = 0.000$). Nagelkerke's R^2 indicates that 58.1 per cent of the probability of disclosing financial information on websites is explained by the four variables integrated in the model.

We have also examined the assumptions for logistic regression. Homoscedasticity was examined using the White Test, the results of which equalled 39.93 ($p = 0.058$), based on which the null hypothesis on the existence of homoscedasticity cannot be rejected. Multicollinearity was examined by means of the variance inflation factor (VIF) and the TOL (Tolerance) calculations. The VIF values for all regression coefficients are below 5, while TOL is greater than 0.2, which indicates the absence of multicollinearity.

On the basis of the results from Table IV, a regression model equation can be formed:

$$\text{Log} [p/(1-p)] = 8.495 + 1.585 \beta_1 + 0.001 \beta_2 - 0.107 \beta_3 + 3.448 \beta_4$$

The variables in the equation also give us Exp (B):

$$\text{Odds} [p/(1-p)] = e^{4.890.412 + 4.882 \beta_1 + 1.001 \beta_2 + 0.898 \beta_3 + 31.451 \beta_4}$$

Where

- β_1 – legal form of company;
- β_2 – number of employees;
- β_3 – ownership concentration; and
- β_4 – industry sector.

The individual hypotheses were checked based on the logistic regression model equation:

- The “number of employees”, “assets” and “income” variables measured the company's size. A statistically significant correlation was detected in the variable “number of employees”. As a result, the $H1$ can be confirmed partially with 95 per cent reliability because of the positive correlation between the company's size and the voluntary disclosure of financial information on the internet. For every one point increase in the number of employees, the odds of the IFR increased by a factor of 1.001 (0.1 per cent), with all other factors being equal.

	B	S.E.	Wald	df	Significance	Exp(B)
<i>Full model</i>						
Legal form of company	1.585	0.471	11.309	1	0.001	4.882
Number of employees	0.001	0.000	4.534	1	0.033	1.001
Ownership concentration	-0.107	0.029	13.243	1	0.000	0.898
Industry sector	3.448	0.685	25.375	1	0.000	31.451
Constant	8.495	2.940	8.351	1	0.004	4,890.412

Table IV.
Variables in the equation

Similar results were also reported by the following researchers: [Marston and Leow \(1998\)](#), [Craven and Marston \(1999\)](#), [Pirchegger and Wagenhofer \(1999\)](#), [Ettredge et al. \(2001\)](#), [Debreceeny et al. \(2002\)](#), [Larran and Giner \(2002\)](#), [Allam and Lymer \(2003\)](#), [Oyelere et al. \(2003\)](#), [Xiao et al. \(2004\)](#), [Bollen et al. \(2006\)](#), [Al-Shammari \(2007\)](#), [Trabelsi et al. \(2008\)](#), [Damaso and Lourenço \(2011\)](#), [Mohamed and Basuony \(2015\)](#).

- *H4* can be confirmed because the “Company legal form” variable (Public Limited Company or limited liability company) correlates significantly with the voluntary disclosure of financial information on the internet. For every one point increase in the legal form of the company (Public Limited Company), the odds of IFR increased by a factor of 4.882 (388.2 per cent), with all other factors being equal.

Comparison with foreign research regarding this variable was not possible because all research carried out abroad dealt with a sample comprised merely of Public Limited Companies.

- *H5* can also be confirmed because the “ownership concentration” variable had a significant correlation with the voluntary disclosure of financial information on the internet. For every one point increase in ownership concentration, the odds of IFR increased by a factor of 0.898 (−10.2 per cent), with all other factors being equal. Similar results were also reported by the following researchers: [Pirchegger and Wagenhofer \(1999\)](#), [Oyelere et al. \(2003\)](#), [Marston and Polei \(2004\)](#), [Abdelsalam et al. \(2007\)](#) and [Al-Moghawli \(2009\)](#).
- The “industry sector” variable measured the impact of the sector on the voluntary disclosure of financial information on the internet and, thus, confirmed *H6*. For every one point increase in the industrial sector (Financial sector, Energetics and ICT), the odds of IFR increased by a factor of 31.451 (3045.1 per cent), with all other factors being equal.

Similar results were also achieved by [Marston and Shrivs \(1996\)](#), [Gowthorpe and Amat \(1999\)](#), [Brennan and Hourigan \(1999\)](#), [Ettredge et al. \(2001\)](#), [Oyelere et al. \(2003\)](#), [Xiao et al. \(2004\)](#), [Al-Htaybat and Napier \(2006\)](#), [Al-Shammari \(2007\)](#), [Gandia \(2008\)](#).

However, this research was unable to confirm two hypotheses, namely, hypotheses *H2* and *H3*, which refer to the impact of profitability and age on the voluntary disclosure of financial information on the internet. Similar findings were also established in the research carried out by [Al-Shayeb \(2003\)](#) and [Al-Shammari \(2007\)](#) regarding age and [Marston \(2003\)](#), [Oyelere et al. \(2003\)](#), [Marston and Polei \(2004\)](#), [Al-Shammari \(2007\)](#), [Al-Moghawli \(2009\)](#), [Damaso and Lourenço \(2011\)](#), [Mohamed and Basuony \(2015\)](#) regarding profitability.

5. Conclusion

The article presents the research on the factors according to which the companies which publish the voluntary disclosures of financial information on their websites (IFR companies) differentiate from the companies that decided not to publish them (NIFR companies). The research was carried out on a sample of large companies in Slovenia ($n = 192$). It was discovered that a good half of them (52 per cent) use IFR.

In the continuation of the research, a logistic regression analysis was used to formulate a model, with the help of which we identified the factors that affect the higher probability that the companies will publish their financial information on websites. To this end, a dependent variable was formulated, which was binary encoded (companies using the IFR and companies that do not use the IFR). The independent variables were related to the size,

profitability, company's legal form, age and the industry sector. The statistically significant variables, which affect the higher probability that the companies will use the IFR, are the following: company's size (measured by the number of employees), ownership concentration, company's legal form and the industry sector. The regression model clarified 58.1 per cent of variability of the dependent variable from the independent variables. The variables measuring the profitability and company's age did not turn out to be significant statistically.

The research was limited only to the determination of factors by which the IFR companies differ from the NIFR companies. However, the users' points of view in relation to the IFR were not observed, which may present the subject of further studies. Such research would allow us to obtain the users' feedback in regard to the content and the IFR method of presentation. The information could be used by the companies in formulating the IFR strategy. It might also encourage the companies who do not use the IFR to learn about the advantages and opportunities offered by the internet and to help them divert from the traditional paper-based reporting to internet reporting in the future.

By performing this research, the IFR on the example of the Slovenian companies has been brought closer to other countries where such studies have already been carried out. However, there are numerous opportunities for further studies. Namely, the research can be carried out once again on a similar sample and with the same methodology, but for a different time period, because of which it could be established whether the level of the IFR changes over time. Also, the sample could be limited to Joint-Stock companies only, while the comparative analysis could help make the comparison with another country (or more countries) and determine the similarities and differences occurring between the countries.

Modern information technology presents new opportunities and challenges for companies, with regard both to presentation and content of reporting. This applies both for the Slovenian, as well as other companies. As regards the manner of reporting, the future holds more opportunities for the use of mobile applications, multimedia presentations, interactive information and the possibilities of personalisation and customisation of information. Another important matter in the future will also be the presentation in a way that will allow their further processing (XBRL language). With regard to the content of reporting, the companies should place a greater emphasis on the Integrated Reporting. Integrated Reporting aims to build on reporting developments to provide a more holistic form of reporting the value created by a business, by considering non-financial resources such as human, social and intellectual capitals, as well as financial capital (Robertson, 2015).

Irrespective of the form and content of reporting, the accounting information should be, in particular, qualitative. This means that the companies should provide their relevance, reliability, timeliness, comprehensibility and comparability. Namely, only in this way will the information be useful for a larger circle of different stakeholders.

Note

1. IFR is the distribution of corporate financial and performance information using internet technologies such as the World Wide Web (FASB – Financial Accounting Standard Board: Steering Committee, 2000; Debreceny *et al.*, 2002).

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