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Portuguese Case**

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## Financial Reporting on the Internet - The Portuguese Case

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## **Financial Reporting on the Internet - The Portuguese Case**

### **ABSTRACT**

Due to recent developments in information technologies, Portuguese companies are using the Internet to disclose accounting information through their web sites. Portugal is thus following a universal trend to use the Internet as a way to provide instant and simultaneous access to accounting information, particularly to existing and potential investors.

After presenting the advantages and eventual risks of this form of financial reporting and analysing previous investigative reports, particularly from the two main accounting standards setting organisations, this paper investigates the degree to which the Internet is being used by Portuguese companies listed on the Lisbon Stock Exchange, to present accounting and financial information. The web sites of these companies were examined throughout March 2000 to February 2001, with a view to determining which companies present financial information and whether the information provided is summarised, identical to the paper version of the Report and Accounts or is more detailed.

In addition, to describe the extent of electronic financial reporting in Portugal, we tested three hypotheses:

- First hypothesis: there is no significant difference between company size and the extent of financial disclosure on the Internet;
- Second hypothesis: there is no significant difference between industry type and the extent of financial disclosure on the Internet;
- Third hypothesis: there is no significant difference between overseas listings and the extent of financial disclosure on the Internet.

Given the totally different context of information reporting that the web represents, we think what nowadays exists is simply the first stage of the growing development in online company performance reports.

## Introduction

The growth of the Internet and particularly the Web has been fast and sustained. This growth is perhaps the most visible example of today's tendency to globalisation and has caused changes in the way financial information flows from companies to investors and creditors. The development of this new form of financial reporting presents accounting and its practitioners with new challenges and opportunities.

In an attempt to debate this new reality, on November 15th 1999 *The International Accounting Standards Committee* (IASC) published a document entitled "Study of Business Reporting on the Internet" as a first step towards a project of standardisation in this matter. This study shows the alterations that occurred in financial reporting and explains how these alterations are affecting the disclosure of accounting and business information.

In that same sense, the *Financial Accounting Standards Board* (FASB) has also published, on 31<sup>st</sup> January 2000, the report "Electronic Distribution of Business Reporting Information", the first of a wider range study in the "Business Reporting Research Project". This first report aims to describe the current state of financial information reporting on the Internet in the United States of America and to identify the most usual practices.

Concern about this new form of financial reporting is present also among the academics and some empirical studies are already being carried out in several different countries. The purpose of this paper is to study electronic financial reporting in Portugal. Therefore, after a brief approach to the advantages and risks of voluntary disclosure of financial information on the Internet, in the third section we will approach the existing literature on this matter and we will present some empirical results observed in other countries. The fourth section will be dedicated to presenting empirical evidence for the Portuguese case. Our empirical study describes, the type of information disclosed on Web sites by the companies listed on the Lisbon and Porto Stock Exchange between March 2000 and February 2001. In doing so, it considers three independent variables that are probably associated with different levels of information disclosure: company size; industry sector and listing in foreign exchange markets.

## **1. The Advantages and Eventual Risks of Voluntary Financial Information Disclosure on the Internet**

Several studies try to explain what leads companies to voluntarily disclose financial information. A great incentive is the need to increase capital at the lowest possible cost. Voluntary information disclosure increases transparency and reduces information asymmetry between company management and investors. It also allows the company to attract new shareholders, which leads to an increase in demand for the company's stock and improves liquidity.

When considering the financial information disclosure on the Internet we may add that, according to Signalling Theory, a company voluntarily places its information on the Internet in order to "send a sign" to the marketplace, saying it is a modern company and keeps up with the latest technological developments.

This new form of financial reporting undoubtedly brings some advantages, but also some concerns and risks, which we will now point out.

### **1.1. The Democratisation of Business Reporting: Information at Low Costs**

According to FASB (2000: vii), more than anything else, the Internet has been used as a means to expand the amount of information available to non-specialist investors, allowing information to be carried to them at low or no cost at all. In fact, any investor with a computer and a modem may obtain information that, until then, was only accessible to a small group of people. The costs of printing and distributing information are no longer a barrier preventing the spreading of the information. It's also much cheaper to modify the information to fit all kinds of users.

It is expected this will change the relations between market participants. Even though these alterations are unpredictable, "it seems clear that the value of being 'informed' will necessarily lower and be replaced by the value of adding knowledge or utility to the information" (FASB, 2000: vii).

## **1.2. Timely Information**

One of the advantages of the Internet as a means of access to information is the timely and frequent character of that information. It is thought that this ability to provide timely and relevant information will eventually bring more efficiency to the financial markets. It is also believed that Internet will lead the annual and biannual cycles of financial reporting to real time reporting. Yet, at this moment, the information obtained through the Internet still comes no faster than other, since it is still the same kind of information. For this advantage to become a reality some practical and legal problems must be solved, such as the integration of current information and previously presented information without exposing the company to significant costs or legal problems. On the other hand, we cannot forget that, the timelier the information, the more potential there is to decrease the reliability of that information.

## **1.3. Thorough Information**

The information provided over the Internet is also expected to be more thorough and complete than the Report and Accounts on paper, given the possibilities of the Internet in terms of the spreading of information. However, we conclude that, at this moment, the contents of the financial information are very variable, with companies that see in the Internet a possibility to improve and expand their financial information and others that supply a very limited amount of information. The way that information is presented is also very variable, which makes comparison a difficult task.

## **1.4. The Potential Risks**

Despite all the advantages the Internet brings to the users of the information, there is a risk of loss of reliability. Hence, even though the Portuguese Securities Market Commission (CMVM - Comissão do Mercado de Valores Mobiliários) has a positive attitude towards using Internet as a way to market assets and disclose financial information, it has recently produced a set of recommendations aiming to protect investors. We point out some recommendations relative to the financial information that are revealing of the concerns of CMVM:

“1.1.

- The information provided over the Internet must be complete, true, recent, clear, objective and legal;
  - The entities that disclose information through the Internet are responsible for its content;
- [...]

2. The CMVM determines, as to the content of the information disclosed over the Internet, that:

- the moment when the information was last updated must be indicated on the homepage;
- when it is external to the site in question, the source must be identified;
- the fact that the information refers to a full document, an extract or a summary must be mentioned;
- when the information is destined to residents in Portugal, it must be in the Portuguese language, unless the CMVM agrees to another language;
- Security measures must be adopted to guarantee the integrity and authenticity of the information disclosed on the Internet;

[...]

5.2. About financial information:

- mentioning clearly whether the information has been approved or not;
- identifying the Report and Accounts (namely the date of reference and the simple or consolidated nature of the accounts), accompanying them with the legal accounts certification and, in such cases, an External Audit Report.” (CMVM, 2000)

Apart from this kind of Stock Exchange regulation, the companies using the Web to, their business report are operating without national or international accounting orientations. Recognising the need to supply immediate accounting guidelines, the IASC (1999) considers the possibility of developing a “Code of Conduct” for the report on the Internet, of which we point out the following guidelines:

- the information disclosed on the Web must not be contradictory to other published forms of financial information;
- if, for any reason, the online documents do not provide complete information regarding the original format, that fact must be indicated; it must also be indicated if there is additional information or not to the original format; in case there is additional information, it must be indicated whether it has been audited or not;

- if the financial statements are elaborated according to the Generally Accepted Accounting Principles (Princípios Contabilísticos Geralmente Aceites - PCGA) of the country, of IASC or of any other country, such fact must be mentioned; in case the demonstrations are constructed according to several PCGA, the relevant differences must be explained;
- Information that is not prepared using the national and international standards (forecasts, qualitative information, management reports, etc.) must be disclosed separately, in a way not to induce the idea that it is consistent with the standards.

## 2. Financial Report on the Internet: Previous Empirical Studies

Both the FASB and the IASC documents above mentioned are concerned with listing the companies that are already doing electronic financial reporting (chapters 3 and 4, respectively).

Since, in general, the studies are performed at each country's level, the IASC has decided to analyse the extent and characteristics of electronic financial reporting in several countries. In order to do that it has performed an inquiry to the largest listed companies in 22 countries. The sample was composed of the 30 largest companies in the Dow Jones Global<sup>1</sup> index of the 22 countries, summing to 660 companies. The selection of the countries was made so as to obtain a good geographic balancing and a group of advanced and developed capital markets. For consistency, the IASC has only analysed the annual accounts. As a result, it was concluded that 86% of the sample had a Web site, varying from 100% in Germany, Canada, Sweden and the United States to 53% in Chile. From the 62% (410) of companies that supply financial information in some way, 80% (327) use, in any way, HTML, with 57% (234) disclosing important elements of their financial statements on the Web and in HTML (a more advanced and flexible format than the "electronic paper" - Adobe Acrobat).

The IASC has also noted that the disclosure of the financial statements in HTML was very changeable: while some companies only supplied the main financial statements (Balance Sheet, Income Statement and, some times, Cash Flow Statement), others supplied the complete financial statements, including the Notes of Accounts and Audit Report.

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<sup>1</sup> For information on the national indexes see <http://www.dowjones.com/>



Many Web sites provide the possibility to download financial statements, with a considerable variation between countries, with emphasis to the Canadian companies (27 out of 28) and Norwegian (20 out of 21) for allowing, almost all of them, downloads.

The FASB project “Electronic Distribution of Business Reporting Information” limits the investigation to companies in the United States. The work was structured as follows:

- they developed a list of attributes considered relevant, according to previous investigation works;
- members of the Work Group and students from California State University visited the Web sites of the Fortune 100 companies to determine their current practices in this matter; all data was collected in a single day (January 30, 1999) to avoid the outdating of the data of the first companies visited by the time the 100<sup>th</sup> was analysed;
- the attributes were divided into two basic groups: attributes related to the company’s general Web site and attributes related to the financial report and relations to the investor;
- The companies were contacted in the sense of discovering how long they have been disclosing their information on the Internet, their philosophy and objectives and their target audience.
- From the results of this investigation we point out the following:
- out of 100 companies, 99 had Web sites;
- of those 99, 93 included some form of relationship with the investors and financial information on their Web pages;
- the attributes related to those pages varied significantly, with companies presenting highly detailed information and others only summarised information; in terms of financial statements, 74% included the complete versions (equal to the paper versions), but only 63% presented the notes to the financial statements;
- as a curious fact, the high technology companies presented, in general, 38% more attributes than the others did.

When comparing these two works to previous investigations we must conclude that there is a growing trend to an increase in the number of companies with a Web site and to an inclusion of more and more financial information. In fact,

- Petravick and Gillett (1996) concluded that 69% of the Fortune 150 companies of the United States had a Web site and 54% included some form of financial information and 31% presented their annual accounts;

- Louwers, Pasemark and Typpo (1996) concluded that 65% of the Fortune 150 companies in the United States had a Web site and 23% made information related to their annual accounts available;
- Gray and Debreceeny (1997) concluded that of the Fortune 500 companies in the United States 98% had a Web site and 36% distributed their annual reports;
- Lymer (1997) analysed the 50 largest companies listed in the United Kingdom Stock Exchange and concluded that 92% have a Web site and 32% included the annual accounts;
- Lymer and Tallberg (1997) analysed all the (72) companies in the stock market in Finland and concluded that 90% had Web sites, with only 11% of them including financial information related to their annual accounts;
- Flynn and Gowthorpe (1997) analysed the Fortune 100 companies and concluded that 89% of them had a Web site and 39% included their annual accounts;
- Sánchez Barrios (1999) analysed the Spanish IBEX and concluded that 63% of the companies had a Web site, 20% with their annual accounts;
- Deller, Stubenrath and Weber (1998) analysed the 100 largest German companies and concluded that 76% had Web sites, 36% of them including their annual accounts;
- Gowthorpe and Amat (1999) analysed the 379 companies listed on the Madrid Stock Exchange and concluded that only 19% of them had Web sites, of which only 5% included some form of financial information;
- Molero, Prado and Sevillano (1999) reported that 45% of the companies in the Madrid Stock Exchange had Web sites and, of these, 56% included some form of financial information;
- Craven and Marston (1999) analysed the largest 200 companies listed by capitalization in the Financial Times and concluded that 74% had Web sites and 33% included their annual accounts;
- Hedlin (1999) analysed the 60 companies listed in the Stockholm Stock Exchange and concluded that 98% of them had a Web site and 83% disclosed their annual accounts;
- Pirchegger and Wagenhofer (1999) analysed 32 companies listed in the Vienna Stock Exchange and concluded that 88% of them had a Web site, 84% of which disclosed their annual accounts;
- Hassan, Jaffar; Johl (2000) analysed 247 out of 705 companies listed in the Kuala Lumpur Stock Exchange and concluded that only 36% of them had a Web site;

➤ Fisher, Laswad and Oyelere (2000) analysed the 220 companies listed in the New Zealand Stock Exchange and concluded that 60% of them had a Web site.

Based on these studies that analysed the different practices of financial information disclosing on the Internet, we can conclude that, in most countries, the great majority of the companies have Web sites, which are true financial information warehouses, even though its quantity and quality may change from country to country.

Of no less importance have been other studies developed with the purpose of determining the reasons that lead companies to disclose financial information on their Web sites, as that developed by Flynn and Gowthorpe (1997) and in which they concluded that the financial reporting practices on the Internet vary according to the cultural and economic aspects in which the companies are based.

In 1998, Marston and Leow have analysed the relation between the characteristics of the FTSE – 100 companies in the United Kingdom, reporting to 1996 and the practices for disclosure over the Internet. Based on Agency Theory, Signalling Theory, Political Process Theory and cost/benefit analysis, they sought to test two hypotheses:

1. the influence of company size in the extent of the information disclosed;
2. the influence of the industry sector in the extent of the financial information.

As for the first, the authors have concluded there was a strong positive correlation; however, as for the second hypothesis, such a correlation was only observed when the companies were classified according to the detail of the information disclosed.

With the purpose of analysing the costs and benefits of financial information disclosure on the Internet, Pirchegger and Wagenhafer (1999), in their study of Austrian companies Web sites, have developed two hypotheses. In the first one, they considered the benefit arising from the cost of information tended to increase with the company size. As for the second, they considered that the bigger the free float of the company's shares the bigger the benefit arising from the use of Internet. In any situation, the tests performed supplied enough evidence to support the statement that the quality of the Web sites tends to increase with the company size and the percent of free float.

### 3. Electronic Financial Reporting in Portugal

#### 3.1. The Sample

According to works performed in other countries, we have selected as a sample for our study the group of companies in the Continuous Market and the Second Market in the Lisbon and Porto Stock Exchange (Bolsa de Valores de Lisboa e Porto - BVLP). One other reason we can provide for our choice is related to the fact that these companies, according to Marston and Leow (1998), tend to be considered large companies. As such, and in comparison to small companies, they are more likely to disclose financial information on the Internet.

In like manner to what had been done in the March 2000 study, we have taken from the BVLP Web site, on February 24<sup>th</sup> 2001 the group of companies to analyse. We verified that, in the analysed period, there was a reduction in the number of listed companies (see Table 1).

**Table 1: Companies listed in the Continuous and Second Markets on BVLP on February 2001 and March 2000**

	Feb/2001 #	Mar/2001 #	Feb/2001 %	Mar/2000 %
Continuous Market	64	70	86,49	85,37
Second Market	10	12	13,51	14,63
Total	74	82	100,00	100,00

Through keywords (companies' names) we have tried to find the Web sites, using the search engines: *Sapo*, *Cusco* and *Altavista*. For those companies whose Web sites were not found, phone contacts were attempted on February the 26<sup>th</sup>. As for the data collection, it was processed between February 24<sup>th</sup> and 26<sup>th</sup>.

In total, as can be inferred from the analysis of Table 2, on February 2001 we have identified 58 Web sites (78%), 54 of the companies in the Continuous Market and 4 from the Second Market. Even though there was a decrease in the number of companies listed in the BVLP in the period we have analysed, the number of companies with Web sites has increased.

**Table 2: Companies in the Continuous and Second Markets on BVLV with and without Web sites on February 2001 and March 2000**

	Continuous Market				Second Market			
	#		%		#		%	
	Feb/2001	Mar/2000	Feb/2001	Mar/2000	Feb/2001	Mar/2000	Feb/2001	Mar/2000
Companies with <i>Web site</i>	54	46	84,38	65,71%	4	4	40,00	33,33
Companies without <i>Web site</i>	10	24	15,62	34,29%	6	8	60,00	66,67
Total	64	70	100,00	100,00%	10	12	100,00	100,00

### 3.2. Descriptive Analysis

We will now point out some of the results obtained in our research. Of the 58 companies with Web sites in February 2001, only 39 (67%) supply financial information (against 34 companies in March 2000). Table 3 shows the companies listed in the Continuous Market and Second Market of BVLV with financial information on their Web site divided by activity sector in the two moments in our study. We point out, in this matter, the importance, on February 2001, of the “Other Activities and Services Provided to Companies”, in contrast to what had been verified in March 2000, when there was a major importance from the sector of financial intermediation.

**Table 3: Companies in the Continuous and Second Markets on BVLV with Financial Information in their Web Site in Different Activity Sectors on February 2001 and March 2000**

ACTIVITY SECTOR	CAE	Continuous Market		Second Market		Totals			
		#		#		#		%	
		Feb/2001	Mar/2000	Feb/2001	Mar/2000	Feb/2001	Mar/2000	Feb/2001	Mar/2000
Food and beverage industry	15	1	1	0	0	1	1	2,56	2,86
Paper pulp, paper and cardboard industry	21	2	2	0	0	2	2	5,13	5,71
Chemical products industry	24	3	2	0	0	3	2	7,69	5,71
Non metallic minerals industry	26	2	2	0	0	2	2	5,13	5,71
Automobiles and tow trucks	34	1	1	0	0	1	1	2,56	2,86
Other transport materials	35	1	0	0	0	1	0	2,56	0,00
Production and distribution of electricity, gas and steam	40	1	1	0	0	1	1	2,56	2,86
Building construction	45	1	1	0	0	1	1	2,56	2,86
Postal services and telecommunications	64	2	2	0	0	2	2	5,13	5,71
Financial services	65	8	11	1	1	9	12	23,08	34,29
Insurance and mutual funds	66	0	2	0	0	0	2	0,00	5,71
Information technologies and related	72	1	1	0	0	1	1	2,56	2,86
Other activities and services provided to companies	74	15	8	0	0	15	8	38,46	22,86
Total		38	34	1	1	39	35	100,00	100,00

As for the kind of information included in the Web sites, we have divided our analysis into Report and Accounts, Summarised Financial Information, Chairman's Statement, Main Events and Management Report. The results are displayed in the following Table:

Table 4: Type of Financial Information in the Web sites

Activity Sector	CAE	Report and Accounts		Total	Summary of Financial Information		Total	Chairman's Statement		Total	Main Events		Total	Management Report		Total
		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No	
Food and beverage industry	15	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	0 (1)	1 (0)	1 (1)	
Paper pulp, paper and cardboard industry	21	2 (2)	0 (0)	2 (2)	1 (1)	1 (1)	2 (2)	2 (2)	0 (0)	2 (2)	1 (1)	1 (1)	1 (1)	1 (1)	2 (2)	
Chemical products industry	24	1 (0)	2 (2)	3 (2)	3 (2)	0 (0)	3 (2)	2 (0)	1 (2)	3 (2)	1 (0)	2 (2)	1 (0)	2 (2)	3 (2)	
Non metallic minerals industry	26	1 (0)	1 (2)	2 (2)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	1 (0)	1 (2)	2 (2)	
Automobiles and tow trucks	34	0 (0)	1 (1)	1 (1)	1 (1)	0 (0)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	0 (0)	1 (1)	1 (1)	
Other transport materials	35	0 (0)	1 (0)	1 (0)	1 (0)	0 (0)	1 (0)	0 (0)	1 (0)	1 (0)	1 (0)	0 (0)	0 (0)	1 (0)	1 (0)	
Production and distribution of electricity, gas and steam	40	1 (0)	0 (1)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	0 (0)	1 (1)	1 (1)	0 (1)	1 (1)	
Building construction	45	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	0 (0)	1 (1)	
Postal services and telecommunications	64	2 (2)	0 (0)	2 (2)	1 (1)	1 (1)	2 (2)	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	
Financial services	65	4 (5)	4 (7)	8 (12)	7 (10)	1 (2)	8 (12)	2 (3)	6 (9)	8 (12)	7 (5)	1 (7)	4 (4)	4 (8)	8 (12)	
Insurance and mutual funds	66	0 (0)	0 (2)	0 (2)	0 (2)	0 (0)	0 (2)	0 (0)	0 (2)	0 (2)	0 (0)	0 (2)	0 (0)	0 (2)	0 (2)	
Information technologies and related	72	1 (0)	0 (1)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (1)	1 (2)	0 (0)	1 (1)	1 (1)	0 (1)	1 (1)	
Other activities and services provided to companies	74	8 (2)	7 (6)	15 (8)	8 (7)	7 (1)	15 (8)	6 (0)	9 (7)	15 (7)	7 (2)	8 (6)	11 (2)	4 (6)	15 (8)	
Total		21 (13)	17 (22)	38 (35)	27 (30)	11 (5)	38 (35)	17 (10)	21 (25)	38 (35)	20 (11)	18 (24)	23 (11)	15 (24)	38 (35)	

( ) Information regarding results obtained in March 2000.

As can be seen in Table 4, there has been a significant increase in the number of companies (from 13 to 21) that present the Report and Accounts, the Message from the President to Shareholders (from 10 to 17), the main events (from 11 to 20) and the Management Report (from 11 to 23).

Regarding the elements of the financial statements, and just as had happened in the IASC study, the Balance Sheet and Income Statement are the most presented, which is not that strange, given the role these two statements play in understanding the true and fair view of the company's financial and economic situation. It must also be noted that, unlike what is seen in the IASC study, there are a small percentage of companies that present the Cash Flow Statement. Note that, relatively to the first study, there is a greater concern from the companies to disclose their financial statements (see Table 5):



Table 5: Financial Statements (February 2001 and March 2000)

Activity Sector	CAE	Balance Sheet		Income Statement		Income Statement by Cost Area		Cash Flow Statement		Notes to the Accounts			
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
Food and beverage industry	15	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)
Paper pulp, paper and cardboard industry	21	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	2 (2)
Chemical products industry	24	2 (0)	1 (2)	3 (2)	2 (0)	1 (2)	3 (2)	1 (0)	2 (2)	3 (2)	1 (0)	2 (2)	3 (2)
Non metallic minerals industry	26	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	0 (0)	2 (2)	2 (2)	1 (0)	1 (2)	2 (2)
Automobiles and tow trucks	34	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)
Production of other transportation material	35	0 (0)	1 (0)	1 (0)	0 (0)	1 (0)	1 (0)	0 (0)	1 (0)	1 (0)	0 (0)	1 (0)	1 (0)
Production and distribution of electricity, gas and steam	40	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	1 (1)	1 (1)	1 (1)	0 (0)	1 (1)
Building construction	45	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	1 (1)	1 (1)	1 (1)	0 (0)	1 (1)
Postal services and telecommunications	64	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	0 (0)	2 (2)
Financial services	65	7 (8)	1 (4)	8 (12)	7 (8)	1 (4)	8 (12)	8 (12)	4 (5)	8 (12)	4 (5)	4 (7)	8 (12)
Insurance and mutual funds	66	0 (0)	0 (2)	0 (2)	0 (0)	0 (2)	0 (2)	0 (2)	0 (0)	0 (2)	0 (0)	0 (2)	0 (2)
Information technologies and related	72	1 (0)	0 (1)	1 (1)	1 (0)	0 (1)	1 (1)	1 (1)	1 (0)	1 (1)	1 (1)	0 (1)	1 (2)
Other activities and services provided to companies	74	12 (4)	3 (4)	15 (8)	12 (4)	3 (4)	15 (8)	0 (0)	15 (8)	3 (1)	12 (7)	15 (8)	9 (7)
Total		30 (21)	8 (14)	38 (35)	30 (21)	8 (14)	38 (35)	4 (4)	34 (31)	13 (9)	25 (26)	38 (35)	38 (35)

( ) Information regarding results obtained in March 2000.

The Balance Sheet and Income Statement are presented by 30 companies (21 in March 2000);  
 The Notes to Financial Statements are presented by 20 companies (only 10 in March 2000);  
 The Cash Flow Statement is presented only in 13 companies (9 in March 2000).

In Table 6 it is possible to verify, on the one hand, the small number of companies that present the Legal Certification of Accounts and, on the other hand, the importance of the Statutory Auditor's Report since, of all the elements, it is that which is made available by a larger number of companies, namely in the sectors of financial intermediation and services:

**Table 6: Account Certification Elements**

Activity Sector	CAE	Statutory Auditors Report		Total	External Auditors Report		Total	Report and Opinion of Statutory Audit Board		Total
		Yes	No		Yes	No		Yes	No	
Food and beverage industry	15	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)	0 (1)	1 (0)	1 (1)
Paper pulp, paper and cardboard industry	21	1 (1)	1 (1)	2 (2)	1 (1)	1 (1)	2 (2)	0 (0)	2 (2)	2 (2)
Chemical products industry	24	1 (0)	2 (2)	3 (2)	1 (0)	2 (2)	3 (2)	1 (0)	2 (2)	3 (2)
Non metallic minerals industry	26	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	2 (2)
Automobiles and tow trucks	34	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)
Production of other transportation material	35	0 (0)	1 (0)	1 (0)	0 (0)	1 (0)	1 (0)	0 (0)	1 (0)	1 (0)
Production and distribution of electricity, gas and steam	40	1 (0)	0 (1)	1 (1)	1 (0)	0 (1)	1 (1)	1 (0)	0 (1)	1 (1)
Building construction	45	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (1)
Postal services and telecommunications	64	2 (2)	0 (0)	2 (2)	2 (2)	0 (0)	2 (2)	1 (1)	1 (1)	2 (2)
Financial services	65	4 (6)	4 (6)	8 (12)	3 (5)	5 (7)	8 (12)	4 (4)	4 (8)	8 (12)
Insurance and mutual funds	66	0 (0)	0 (2)	0 (2)	0 (0)	0 (2)	0 (2)	0 (0)	0 (2)	0 (2)
Information technologies and related	72	1 (0)	0 (1)	1 (1)	1 (0)	0 (1)	1 (1)	1 (0)	0 (1)	1 (1)
Other activities and services provided to companies	74	8 (1)	7 (7)	15 (8)	5 (1)	10 (7)	15 (8)	7 (1)	8 (7)	15 (8)
Total		19 (12)	19 (23)	38 (35)	15 (11)	23 (24)	38 (35)	16 (8)	22 (27)	38 (35)

( ) Information regarding results obtained in March 2000.

In an attempt to understand the degree of globalisation of the financial information provided by the Portuguese companies, we have also studied languages in which the Web sites with financial information are presented. In Table 7, it is possible to observe that, unlike what happened in the study performed in March 2000 when 51.43% of the financial information was presented in Portuguese and English, only 47.37% of the financial information is presented in Portuguese and English and we can verify a significant tendency to the presentation of information in Portuguese.

**Table 7: Languages of the Web sites/Web sites with financial information and Financial Statements**

	Web Sites	%		Web Sites with Financial Information	%		Financial Statements	%	
		Feb. 2001	Mar. 2000		Feb. 2001	Mar. 2000		Feb. 2001	Mar. 2000
Portuguese	31 (23)	53,45	46,00	18 (15)	47,37	42,86	17 (15)	44,74	42,86
English	1 (2)	1,72	4,00	1 (0)	2,63	0,00	1 (0)	2,63	0,00
Portuguese/English	22 (23)	37,93	46,00	16 (18)	42,11	51,43	18 (19)	47,37	54,29
Portuguese/English/Spanish	2 (0)	3,45	0,00	2 (0)	5,26	0,00	1 (0)	2,63	0,00
Portuguese/English/French/Spanish	2 (2)	3,45	4,00	1 (2)	2,63	5,71	1 (1)	2,63	2,86
Total	58 (50)	100,00	100,00	38 (35)	100,00	100,00	38 (35)	100,00	100,00

( ) Information regarding results obtained in March 2000.

### 3.3. Hypotheses

Apart from the description of the kind of information available in the Web sites, we have tried, after an analysis of empirical studies performed in other countries, to test the existence or non-existence of correlation between the company size and the extent of the financial information disclosed in the Internet. For that reason we have used the hypotheses tests methodology, having conceived the following hypotheses:

H<sub>0</sub><sub>1</sub> – There is no significant difference between company size and the extent of financial disclosure on the Internet.

H<sub>1</sub> – There is significant difference between company size and the extent of financial disclosure on the Internet.

According to Foster (1986, p. 44) company size is considered the most significant variable when it is intended to analyse differences between companies in what concerns its financial information disclosure politics. Apart from that, agency theory suggests that bigger the company bigger are agency expenses (Jensen and Meckling: 1976). This way, it seems logical that regarding voluntary disclosure interests, the bigger companies have other incentives than the smaller ones.

In order to determine a company size, in like manner to the work performed by Marston and Leow (1998), we selected four variables, namely, turnover, number of employees, total assets and company market value.

As far as turnover, and since we do not possess update data concerning economic year 2000, we have used data from the individual accounts for economic year of 1999 that, in the case of companies corresponds to selling total and service rendering; for the Financial Institutions corresponds to the banking product, and for insurance companies corresponds to the premiums.

Data concerning total assets and number of workers were obtained from companies' individual accounts, for 1999.

Finally, the market value was reached having as reference point the last quotation at closing of Companies stocks in 1999.

H02 – There is no significant difference between industry type and the extent of financial disclosure on the Internet;

H2 - There is significant difference between industry type and the extent of financial disclosure on the Internet.

In Verrechia's (1983) opinion, political costs and those cost consequences of competition disadvantages vary according to industry type. Consequently, the fact that if a certain company is more or less connected to sectors with considerable investments in research or connected to high technologies may influence voluntary information disclosure.

This hypothesis relies on work performed by Lymer (1997) and Wildstrom (1997), according to what it seems to exist a relation between information disclosure in the Internet and activity sector, and at this point it was considered accurate to formulate a third hypothesis to prove this fact.

H0<sub>3</sub> – there is no significant difference between financial disclosure of overseas listed companies and the companies listed in the Portuguese market;

H<sub>3</sub> – there are differences between financial disclosure of overseas listed companies and the companies listed in the Portuguese market;

For Meek and Gray (1989), overseas listed companies face additional pressure from the national capital markets. Moreover, the authors of the study performed to the companies listed in London

Stock Market have verified that these pressures were far beyond the disclosure demands. So, they summed up that the demands from Stock Markets seem to be minimal when compared with competitive pressure involved in the search for investments in the International Capital Markets.

### 3.3.1. Results

#### 3.3.1.1. Hypothesis Test and Correlation Coefficient

In order to verify the linear relation between company size variables we proceed to determination of correlation coefficients.

**Table 8 – Correlation between different size variables**

	Turnover	Number of Employees	Total Assets
Number of Employees	0,426		
Total Assets	0,568	0,302	
Market Value	0,823	0,513	0,565

From Table 8 it is possible to ascertain that the results are in conformity with the studies performed by Marston and Leow (1998) and Craven and Marston (1999), since the business volume and market value are strongly correlated (0,823).

Since our sample is of small dimension, we decided to use the non-parametric method *Kruskal-Wallis* to test if there are significant differences between the medium values of the several size variables concerning the amount of financial information disclosure via Companies Web Sites, having determined 5% as significance level.

**Table 9 – Testing company size against existence or not of websites**

Website	Turnover	Total Assets	Number of Employees	Market Value
Kruskall- Wallis	10,630	11,320	5,002	4,318
Degrees of Freedom	1	1	1	1
Levels of Significance	0,001	0,001	0,067	0,098

As it is possible to observe on Table 9, for a significance level of 5% only variables of Turnover dimension and Total Assets are correlating in a positive way with the Web Site existence or Non-existence of a Web Site (rejecting  $H_0$ ). Additionally, we have noticed the opposite for the remaining variables.

**Table 10 – Testing company size against the existence or not of financial information on the websites**

<b>Financial Information</b>	<b>Turnover</b>	<b>Total Assets</b>	<b>Number of Employees</b>	<b>Market Value</b>
Kruskall- Wallis	4,287	8,545	4,896	8,427
Degrees of Freedom	1	1	1	1
Levels of Significance	0,038	0,003	0,027	0,004

Table 10 tests the size variables and the existence or not of financial information in the companies Web Sites. So, as result of the test for a significance level of 5% we infer that all dimension variables are relating in-between in a positive way with the existence or not of financial information in the Web Sites (rejecting  $H_0$ ).

**Table 11 – Testing company size against presentation of financial information disclosure in websites with Financial Information**

<b>Presentation</b>	<b>Turnover</b>	<b>Total Assets</b>	<b>Number of Employees</b>	<b>Market Value</b>
Kruskall- Wallis	2,256	0,514	2,798	2,256
Degrees of Freedom	1	1	1	1
Levels of Significance	0,133	0,473	0,094	0,133

As far as size variable and the detail or summarised degree of financial information disclosure is concerning, we concluded that for a significance level of 5% there is no correlation between them, this means, it is not possible to reject the null hypothesis ( $H_0$ ).

In order to determine the existence of differences between Web Site existence variables, financial information and detailed financial information per different activity types, we perform the chi-square test ( $\chi^2$ ).

Contrarily to what was done for the Web Sites content analysis and, similarly to Holm (2000), we

decided to aggregate the different companies by the following three activities: production, financial, trade and servicing.

This way, we defined as null hypothesis the absence of difference in financial information disclosure in the Internet per activity.

**Table 12 – Chi-square Test ( $\chi^2$ )**

	<b>Website</b>	<b>Financial Information</b>	<b>Detail Financial Information</b>
X2	2,773	2,72	1,132
Degrees of Freedom	2	2	2
Levels of Significance	0,249	0,255	0,567

In a like manner to the results obtained by Marston and Leow (1998) and Craven and Marston (1999), and from the Table 12 analysis, also did we conclude that there are no pertinent differences in the financial information degree per activity sector, this means, there is no relation what so ever between activity type and the amount of financial information disclosure.

Finally, so as to verify existence of a correlation between information disclosure in the Internet and the fact that the company is listed in overseas markets, once again we performed the chi-square test  $\chi^2$ . However, we have decided to exclude to present hereby the results archived as it was impossible to obtain any conclusions, since the appliance conditions of the chi-square test ( $\chi^2$ ) were violated.

## **Conclusions**

The "Web" may very soon occupy the role of the main means financial reporting. As everything is indicating, we are changing from one way of financial reporting almost exclusively in paper into another almost exclusively electronic. In fact, each time more companies place financial information in the Internet.

In Portugal, we came to the conclusion that companies are starting to face positively this new way of financial reporting. As we saw through the analysis of period from March 2000 to February 2001,

each time more companies have "Websites" and the amount of account information available is growing at a good rhythm. Nevertheless, are still well behind the desirable, as financial information presented on its "web Sites" does not even corresponds, in the great majority, to information available in the traditional format.

Concerning the hypotheses Tests performed we noticed that, as it happens in other countries, there is a positive correlation between company size and the existence of Web Site and the company size and the financial information disclosed.

As far as influence of the economic activity in the level of information disclosure in the Internet is concerning, there are no correlation. Due to limitations ensuing from the reduced number of companies listed and the small number of companies listed in overseas markets, it was not possible to prove the fact that a company listed internationally influences positively the disclosure of Financial Information in the Internet.

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