# IFRS. FIRST TIME USERS: SOME EMPIRICAL EVIDENCE FROM GREEK COMPANIES

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#### Abstract

The main object of this paper is to examine accounting harmonisation in a sample of companies with regard to the use of International Financial Reporting Standards (IFRS). The research instrument took the form of a questionnaire, which was completed by the company accountants. Our investigation focused on the current level of harmonisation. Analysis using the independent chi-square test (p<0.05) showed that: (a) compliance with IFRS was not independent of company size or stock exchange listing status, (b) familiarity with IFRS was not independent of company size or listing status, and (c) familiarity with IFRS was independent of the type of business in which the company was engaged (commercial, manufacturing, services).

The results of the study indicate that: (1) Listed firms tend to comply with IFRS earlier and more easily than non-listed companies, and (2) Large and medium-sized firms tend to comply with IFRS requirements to a greater extent. This is also valid for listed firms.

JEL Classifications: M41, M49

Keywords: International Financial Accounting Standards; Compliance; Accounting Harmonization; Disclosure; Reporting; Greece.

#### 1. Introduction

The International Financial Reporting Standards (IFRS) formerly IAS (International Accounting Standards) are a set of accounting standards that can be used to bring about uniformity in financial reporting on a global basis. The need for international standards arises from the increasing internationalisation of business and, in particular, the growth of international capital markets, in which there is a demand for accounting information that is comparable across companies that are located in different countries.

By embracing global accounting standards, Europe is embracing a vision for financial reporting. It is a vision that considers fair value measurement to be paramount, and rejects historical costs, accruals and the realization principle as irrelevant. The International Accounting Standards Committee (IASC) was founded in 1973. Its business is conducted by a Board, and its main interest is in financial reporting. One of its objectives (1998) is to harmonise, as far as possible, the diverse accounting standards and accounting policies of different countries. In May 2000, the IASC (which the following year was renamed the International Accounting Standards Board - IASB), was endorsed by the International Organisation of Securities Commissions (IOSCO), and the European Commission (EU) announced that it encouraged member states to pass legislation requiring all EU listed companies to prepare and report consolidated financial statements based on IFRS by the year 2005 (Street and Gray, 2002).

The International Accounting Standards issued by the IASC are constantly reviewed and revised to take into account the current position and the need for true and complete reporting. The members of the IASC (1998) believed that the adoption of IFRS in their countries and the disclosure of compliance requirements would, over the years, have a significant impact: the quality of financial statements would be improved and there would be increasing comparability, thus enhancing the credibility and consequently the usefulness of financial statements around the globe.

The success of IASC efforts is dependent upon recognition of and support for its work from many different interested groups acting within the limits of their several jurisdictions. The prestige and esteem enjoyed by the accounting profession in most countries are of great significance in these efforts. The IASB is now associated with the International Federation of Accountants (IFAC), which has stated that auditors are certifying compliance with IFRS in financial statements where accounting policies and notes indicate otherwise (Cairns, 1997).

The European Union strategy with regard to the harmonization of accounting rules has been to use directives, to which all member states have adapted their legislation (Canibano and Mora, 2000). The directives are generally consistent with, but less detailed and more flexible than International Accounting Standards (European Commission, 1995). Although the flexibility of the directives has limited the degree of harmonization, the directives have nonetheless led to significant improvements in financial reporting in the member states.

European Union (EU) Regulation 1606/2002 was a watershed (Cairns, 2003). EU Regulation 1606 states that "member states are required to take appropriate measures to ensure compliance with international accounting standards" (EC,2002). This regulation not only applies to full members of the EU but also to members of the European Economic Area (Whittington, 2005). It requires all listed companies of member states to prepare consolidated financial statements based on IFRS beginning 1 January 2005 (Brown and Tarca, 2005). The announced aim of IFRS adoption in the EU was to improve the quality of companies' financial reporting by increasing its comparability and transparency, and to promote the development of a single capital market in Europe (Federation des Experts Comptables Européens, 1999).

Generally speaking, the adoption of IFRS is an effort to improve company credibility. The credibility of Greek companies, particularly those listed on the Athens Stock Exchange (ASE), was severely shaken in 1999-2000. The information content of the Local Accounting Standards (Greek Accounting Standards) is partially responsible for the steady decline in the fidelity and credibility of Greek firms.

Greece adopted accounting harmonization with the enactment of Law 2992/2002, which requires Greek companies listed in the Athens Stock Exchange to apply IFRS, beginning in the calendar year 2003. Later, Greece has tried to alleviate the possible problems that may have emerged from the hastiness to introduce the obligatory application of IFRS in 2003. In short, the new legal changes (3148/2003,3229/2004,3301/2004) have brought Greece into line with the rest European companies, concerning the accounting framework. Therefore, publicly traded companies would be required to report under IFRS by 2005.

Accounting needs vary with a company's size and legal form (Thorell and Whittington, 1994). Small and medium-sized companies have less onerous reporting and publication requirements than larger companies, while the fullest and most complete financial reports are expected from listed companies (Thorell and Whittington, 1994).

In Greece, companies have been venturing into the application of IFRS since the beginning of this year (2003). Although some Greek firms may be well prepared, others are not yet ready to apply IFRS to their accounting requirements. In order to obtain an overall picture of the degree of readiness in Greek companies, we used a questionnaire to elicit the opinions of company accountants. The first question is how well prepared Greek companies are. A second matter that arises from the questionnaire is the level of harmonization in the use of IFRS in Greece and how well organised the process of harmonization is. The level of harmonization is the degree of application of the different IFRS, and the organisation of the process means the preparation of training seminars, notes, manuals and appropriate software for the use and practice of IFRS.

#### 1.1 The concept of accounting harmonization

Harmonization, standardization, and uniformity are all terms used in the literature and in previous research. There is no real difference between them, other than, perhaps, in the degree of harmonization they involve. In each case, the terms used refer to the efforts required to ensure that similar transactions and events are accounted in a uniform way wherever they took place or were reported.

"Standardization" implies uniform standards in all the countries involved.

"Harmonization", however, implies a reconciliation of different points of view, and permits different requirements in individual countries to be reported in a uniform way provided that there is no logical conflict (Canibano and Mora, 2000). "Harmonization" is a process, a movement towards harmony, towards the application of IFRS, which is a state. "Standardization" is also a process, a movement towards uniformity, which is also a state (see Tay and Parker, 1990; Nobes and Parker, 2000). "Harmonization" is a more realistic and conciliatory approach and seems more attainable than rigid "standardization".

The main benefits of harmonization include: (a) Increasing the comparability of financial reports prepared in different countries and providing interested parties in international markets with better quality information upon which they can base their investment and credit decisions; (b) Removing barriers to international capital flows by reducing differences in financial reporting requirements for actors in international capital markets; and (c) Reducing financial reporting costs for multinational companies.

It is essential to recognize that conversion to IFRS is more than just an accounting matter, it is also a business issue. The rapid globalization of doing business went alongside with a strong increase in demand for internationally accepted financial information useful for decision-making. In addition to the accomplishment of investors' information demands, companies have become aware that the adoption of internationally accepted accounting standards have further positive aspects, especially in respect to the efficiency of corporate control (Haller, 2002).

### 2. Review of the literature

It is important to record the existing enforcement of IFRS in Europe. Since the regulated use of IFRS in a range of countries is a process that is just begin-

42

ning, there has been little research addressing the enforcement of international accounting standards (Brown and Tarca, 2005). Our aim is to make a timely-contribution in an area that will become increasingly important as the adoption of IFRS and to evaluate existing situation in Greece (in 2003).

There are numerous studies that deal with harmonization. Among these, Tay and Parker (1990) distinguished between *de jure* harmonization and *de facto* harmonization: the former being harmonization of rules and standards, the latter harmonization of actual practice. Van der Tas (1988) defined *de jure* harmonization as *formal* harmonization and *de facto* harmonization as *material* harmonization. The harmonization of financial reports or standards can refer either to the degree of disclosure or to the accounting method applied. Harmonization of the extent of disclosure will be called disclosure harmonization, while harmonization. The ultimate definition of harmonization comes from Van der Tas (1988): *Materially measurable harmonization is an increase in the degree of comparability and means that more companies in the same circumstances are applying the same accounting method to an event or giving additional information in such a way that the financial reports of more companies can be made comparable.* 

Formal harmonization would normally lead to material harmonization (Canibano and Mora, 2000). In the field of the measurement of harmonization, some researchers have investigated formal harmonization using different statistical methodologies (e.g., Krisement, 1997; Lainez et al., 1997; McLeay et al., 1999; Pierce and Weetman, 2000). Other representative studies, have investigated de facto harmonization using methodologies such as: H index, C index (Van der Tas, 1988), C index, Chi-square (Van der Tas, 1992a, 1992b), I index (Emenyonu and Gray, 1992), I index, Adjusted I index (IC), Chi-square (Garcia-Benau, 1994), C index (Archer et al., 1995), I index , Adjusted I index, Chi-square (Hermann and Thomas, 1995), Nested hierarchy of log-linear models (Archer et al., 1996), V ratio, heterogeneity+entropy (Krisement, 1997) and Nested statistical models (McLeay et al., 1999).

Nair and Frank (1981) attempted to ascertain the impact of the IASC's endeavours towards harmonization. They surveyed the effect of IFRS 1 to 10 on the accounting practices of some thirty seven countries, using the PriceWaterhouse surveys of 1973,1975, and 1979. Doupnik and Taylor (1985) set out to assess the extent to which 16 Western European countries conformed to a "basic core of accounting practice", using IAS 1-8. The findings supported the

hypothesis that many differences still exist in Western European accounting practices, although some increased compliance with IASC standards was identified. This latter finding was, however, disputed by Nobes (1987).

Many research studies have examined similarities and differences in international financial reporting, with the focus on harmonization of the accounting practices used in the preparation and presentation of financial information (Archer, 1995; Emenyonu & Gray, 1992; Herrmann & Thomas, 1995; Tay & Parker, 1990; Van der Tas, 1988; Walton, 1992). These studies concluded that there was a lack of harmonization in either measurement or disclosure practices between and among the countries studied. In effect, there was no "true and fair view" on financial reporting in all member states of the European Union.

Other studies have examined the meaning of "true and fair view". Most have concluded that there is a lack of consistency in the meaning of the term as between accountants and users of financial information. Nobes (1993) traced the development of "true and fair view" and its impact on the laws and practices in the member states in the EU. He concluded that "when true and fair view was enacted into legislation, it lacked consistency among the member states both in the meaning of the term and in the underlying idea".

With regard to the measurement of harmonization, over the last decade some researchers have investigated *de jure* (formal) harmonization (Garrod and Sieringhaus, 1995; Rahman, 1996; Lainez, 1996) and others *de facto* (material) harmonization (see Walton, 1992; Emenyonu and Gray, 1992; Archer, 1995; 1996; Herrmann and Thomas, 1995; Garcia-Benau, 1994; Krisement, 1997; Lainez, 1997; McLeay, 1999; Pierce and Weetman, 2000).

One aspect of the current debate on international accounting harmonization focuses on types of accounting model. In particular, a distinction is made between the Anglo-American accounting cluster and the continental European one. Some argue that Anglo-American accounting is concerned with providing information to a wide range of users for economic decision making purposes whereas continental European accounting is more concerned with protecting the interests of creditors and determining taxation liabilities. Some also make the distinction based on such factors as the way in which accounting requirements are set (private sector standards versus law), whether or not there is a chart of accounts, the size of accountancy profession and so on (Cairns, 1997).

Basically, one may identify two groups that use classification as an element in their argumentation for or against international accounting harmonization. The first group favours the traditional continental European system, which is dominated by the principle of prudence, as the Anglo-American model does not take the specific European environment into consideration (Hoarau 1995). The second group prefers the Anglo-American accounting model as being better equipped to provide information to investors in the capital markets (Epps and Oh, 1997).

Flower (1997) and Nobes (1996) have attempted to maintain the distinction between Anglo-American and continental European accounting. Those who continue to favour these classifications are ignoring what is happening in the world and how companies actually account for transactions and events (Cairns, 1997).

The introduction of IFRS in the EU is obviously an unusually important event for accounting, accountants and accounting researchers (Giner and Rees, 2005). Previous studies have investigated issues related to accounting harmonization in Europe and possible consequences of the IAS Regulation (Harding, 2000; Walton, 2000; Olivier, 2000; Nobes and Parker, 2002; Haller, 2002; Cairns, 2003; Flower, 2004).

In 2004 the issues of transition to IFRS are variable as different countries have different starting points to reach the 2005 platform. In this first stage, researchers look at attitudes to IFRS and US GAAP amongst German (Weibenberger et al., 2004) and Belgian (Jermakowicz, 2004) companies in the run up to 2005 and discuss the technical differences. Ormrod and Taylor (2004) examine the possible consequences on debt covenants of UK companies arising from the switch. Two articles examine attitudes to the use of IFRS: Haller and Eierle (2004) analyse the stance of the German legislators, while Richard (2004) suggests that the current French opposition to fair value is to an extent a repeat of a nineteenth-century battle between static and dynamic accounting. Two further articles are devoted to the transition in accession countries: Vellam (2004) examines the adoption of IFRS in Poland, and Sucher and Jindrichovska (2004) report on a survey in the Czech Republic. A commissioned essay from Gelard (2004) comments on opposition to using fair value for financial instruments, while Hague (2004), who was involved with the development of IAS 39, and is presently developing a Canadian equivalent, reviews that standard (Walton, 2004).

The researchers have continued to work in the area of the adoption in Europe the following year (2005).

Day and Taylor (2005) have examined the role of accounting and auditing

in the process of accession of new member States to the EU. In their view any discussion of the accession process is absent from the literature, and they have set out to provide an analysis of how accounting and auditing requirements are dealt with in that process.

Evans et al., (2005) studied the Discussion Paper Preliminary Views on Accounting Standards for Small and Medium-Sized Entities' (IASB, 2005a,b). Their findings suggest that within the EU, SMEs have considerable economic significance and are currently subject to differential reporting regimes. They argue that the users and these users' needs, differ from those of large, publicinterest enterprises. There are also significant differences between users groups of the smallest versus the larger SMEs.

Tokar (2005) has stated that achieving true convergence of accounting standards is a costly and time-consuming objective. It asks organizations like KPMG to imagine the future and build new policies, links and committees to create an international infrastructure. It has required a huge investment of money, people, and leadership to support the transition to IFRSs, and will require a significant change in the training of accounting students in the near future (Tokar, 2005). Tokar's (2005) paper addresses the impact of convergence on auditing firms by focusing on the adoption of IFRS issued by the IASB.

Wustermann and Kierzek (2005) have demonstrated the inconsistencies in current IFRS revenue recognition that have triggered the project and then presented and discussed three conceptually different revenue recognition models that are internationally debated at present.

Dao (2005) has examined the methods used by the former French Commission des Operations de Bourse (COB) for monitoring compliance with the national reporting rules in relation to the issue of enforcement of IFRS in Europe as from 2005. While there is recent research that addresses the issues on enforcement of accounting standards, there is still a lack of studies which discuss the relevance and effectiveness of the methods used to monitor compliance with accounting standards. Dao's (2005) study may be of interest to different groups of participants in the capital markets.

Delvaille et al., (2005) have tried to compare developments in France, Germany and Italy and the approaches to integrate the current European accounting reform processes with IFRS. Their study evaluates the adaptation of national accounting systems with respect to institutional and regulatory changes on the one hand and financial reporting changes on the other.

Jones and Luther (2005) have examined the possible impact on manufacturing companies drawing upon perceptions and expectations of managers in three Bavarian companies and two management consultancy firms. Their paper consider whether financial accounting will assume an increased importance within firms, and whether this may lead to abandonment of some traditional management accounting practices and the adoption of different techniques in internal reporting compatible with the new IFRS regime for external reporting. Jones and Luther (2005) found that, at this juncture in the development of their information systems, German managers face an important choice between integrating external and internal reporting in ways that might fundamentally change established Controlling practices, or of continuing to operate dual accounting systems in much the same way as in the past so that adoption of IFRS is restricted to external reporting.

Van Tendeloo and Vanstraelen (2005) use the early adoption of IFRS by many German companies to investigate the impact of IFRS on earnings management. Brown and Tarca (2005) employ interviews to analyse different approaches being adopted in four EU countries to deal with enforcement of IFRS.

Pirinen (2005) conducts a historical analysis to review the forces that have impacted on the move towards IFRS in Finland.

Whittington (2005) gives an overview about the activities of the IASB, focusing on the past and present, while Schipper (2005) looks more into the future and analyses the implications of the adoption of IFRS in the EU for international convergence, more precisely for the convergence between IFRS and US GAAP.

As a concluding remark, we believe that introduction of IFRS will be a fascinating subject and opportunity for research in the years to come (Giner and Rees, 2005).

### 3. Research methodology

There are five primary sources of data that can be used in de facto harmonization studies: annual reports, accounting regulations, public databases, questionnaires and laboratory techniques. The use of annual reports has great advantages, but also presents problems. On the other hand, there are obvious advantages involved in using questionnaires: as Tay and Parker (1990) say, someone else has already done all the difficult and tedious work of collecting the data.

In order to measure the "process of harmonization", most studies compare either index values in the two periods to ascertain whether there has been any increase, or statistical distribution in the two periods to see if the probability of a non-random distribution has increased. Van der Tas (1988) was the first to promote the idea of index values. Later, Tay and Parker (1990) suggested that the "evidence of harmony would then be the existence of a significant difference between the observed and expected distributions, as measured by some appropriate significance test, for example chi-square". The relative methodologies that have been developed for measuring the level of harmony may, therefore, be classified into two categories: one category that uses the idea of index values and a second that uses a statistical modelling approach.

In our study, we try to measure the level of harmonization not by comparing two different periods of time but by trying to measure the "level of harmony" at a specific moment. More particularly, we try to measure accounting harmonization in Greece through the use of an appropriate questionnaire.

In accordance with the aim and objectives of the research, the approach presented in this paper is explorative and predictive, as we are trying to track the perspectives of Greek companies by polling their senior financial staff and accountants (professionals).

#### 3.1 The data and the sample

The sample comprises 39 companies. In this research paper, we used nonprobability sampling because we wanted to investigate the degree of preparation for IFRS made in companies that have an organised in-house Accounting Department and where all accounting is done within the company rather than by an external accountant. Given the paucity of companies with these characteristics in the specific region, the sample could not be based on random selection. In the event, we chose 11 ASE-listed companies and 56 non-listed companies with the requisite characteristics. From these 67 firms, we received a total of 39 completed questionnaires: 9 from listed and 30 from non-listed companies.

### 3.2 Questionnaire design'

The questionnaire is divided into six sections.

Section A contains introductory questions, to establish a profile of the company: size, financial position.

Section B investigates the accountants' degree of familiarity with the IFRS.

Section C asks where they got their information about IFRS.

Section D helps us find out whether the companies are ready to use IFRS and whether they need more time for additional staff training and further preparation in their Accounting Departments.

Section E asks about the potential benefits to the company of adopting IFRS.

Section F inquires more precisely into the degree of accountants' knowledge of IFRS.

## 4. Results

Table 1 shows the company profiles: specifically, category, activity, turnover (sales) and number of employees.

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Category of the company	Frequency	Activity of the company	Frequency	Turnover (sales) of the company	Frequency	Number of employees	Frequency
Listed in Athens Stock Exchange	Commerce	8	0 - 3,000,000 Euros	15	0 - 50	21	
		Manufacturing	23	3,000,001 - 9,000,000 Euros	15	51 - 250	8
Non-listed in Athens 30 Stock 20 Exchange	30					251 - 400	5
		Rendering of Service	8	More than 9,000,000 Euros	9	More than 400	5
Total	39	Total	39	Total	39	Total	39

#### The company profiles

Table 2 shows the accountants' degree of familiarity with IFRS: specifically, number of years of experience, awareness of IFRS, familiarity with IFRS.

## TABLE 2

Years of experience	Frequency	Familiarity with IFRS	Frequency	Satisfactory knowledge about IFRS	Frequency
1 to 2 years	1	YES	33	YES	0
3 to 4 years	12				
5 to 6 years	4	NO	6	NO	39
More than 6 years	22				
Total	39	Total	39	Total	39

The acquaintance with the IFRS

Table 3 shows sources of information about IFRS: specifically, where the accountants first learned about IFRS, whether they attended a course on IFRS and, if so, where.

### TABLE 3

### The ways of getting information about IFRS

First learned about IFRS	Frequency	Attending a course on IFRS	Frequency	Place of attention a course on IFRS	Frequency
Press	13	YES	13	Greece	13
Accounting Magazines	25			Another country of the EU	0
Colleagues	15	NO	26		
Attending a special course on IFRS	13			Another country of the world	0
Total	66	Total	39	Total	13

Table 4 shows the degree of readiness to use IFRS: specifically, content knowledge, existence of a special IFRS department, existence of special IFRS application software, ability to publish annual reports based on IFRS.

### TABLE 4

Knowledge of the subject (IFRS)	Frequency	Special section (depart- ment) about the IFRS	Frequency	Special software for the use of IFRS	Frequency	Possibility to publish annual reports based on IFRS	Frequency
Medium	13	YES	0	YES	0	We will surely do it for the year 2003	5
Poor	12					We will probably do it for the year 2003	6
		NO	39	NO	39		
Very Poor	14					We will definitely not do it for the year 2003	28
Total	39	Total	39	Total	39	Total	39

The readiness to use IFRS

Table 5 shows the factors expected to benefit the company using IFRS: specifically, the importance attached to the different factors and their expected impact with the adoption of IFRS.

#### TABLE 5

The factors of assistance provided to the company by using IFRS

Significance of the factors	Frequency	Degree of influence adopting IFRS	Frequency
Increase of sales abroad	1st	Very Good	5
Investments in a foreign country	2nd	Good	25

continues

Significance of the factors	Frequency	Degree of influence adopting IFRS	Frequency
		Medium	4
New investors from abroad	3rd	Poor	4
New suppliers from abroad	4th	Very Poor	1
		Total	39

Table 6 shows the extent of accountants' knowledge of the IFRS: specifically, the number of IFRS currently in force, the content of IFRS 18, the main differences between LAS and IFRS, and which IFRS will require special attention as most widely divergent from LAS (Local Accounting Standards, e.g., Greek Accounting Standards)

## TABLE 6

Volume of IFRS	Frequency	About the content of IFRS 18	Count	Main differences between LAS and IFRS	Frequency	Special attention to	Frequency
22	1	Product Selling	30	Annual Reports	2	IFRS 1	18
41	30	Constructions	9	Dealing of some special cases and events	3	IFRS 11	9
36	7	Rendering of services	25			IFRS 12	1
Not answered	Not 1 interc	Incomes of interest and dividends	11	All the above	31	IFRS 18	1
		Leasing	3	Not answered	3	IFRS 2	1
Total	39	Total	78	Total	39	IFRS 37	1
						IFRS 40	1
						IFRS 41	2
						IFRS 5	1
						All	4
						Total	39

## The degree of knowledge about IFRS

In which one of the following	Do you believe annu	Total		
categories does your company belong	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
Listed in Athens Stock Exchange	4	3	2	9
% of each choice	44,40%	33,30%	22,20%	100,00%
% of each category	80%	50,00%	7,10%	23,10%
Unlisted in Athens Stock Exchange	1	3	26	30
% of each choice	3,30%	10,00%	86,70%	100,00%
% of each category	20%	50,00%	92,90%	76,90%
Total	5	6	28	39
% of each choice	12,80%	15,40%	71,80%	100,00%
	100,00%	100,00%	100,00%	100,00%
	Value	Df	Asymp. Sig. (2 - sided)	Approx. Sig.
Pearson Chi – Square	15.581 <sup>a</sup>	2	0,000	
Nominal by Nominal (Phi)	0,632			0,000

TABLE 7

Notes: a- 4 cells (66,7%) have expected count less than 5. The minimum expected count is 1,15 b- Not assuming the null hypothesisc- Using the asymptotic standard error assuming the null hypothesis

#### TABLE 7A

# Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	0.632	0.000
	Cramer's V	0.632	0.000
	Contingency coefficient	0.534	0.000
Number of Valid Cases		39	-

# TABLE 7B

### Kruskal-Wallis test statistics

H'=14,893	critical value=6,6349	
level of significance=0,01	degree of freedom=1	

### TABLE 8

In which one of the following categories does your company belong	l	Iave you ever a	ttended a specia	ll course on IFR	tS ·
	YES	NO	Total	A MARKED BALL AND A MARKED BALL	
Listed in Athens Stock Exchange	7	2	9		
% of each choice	77,80%	22,20%	100,0%		
% of each category	53,8%	7,70%	23,1%		
Unlisted in Athens Stock Exchange	6	24	30		
% of each choice	20,00%	80,00%	100,0%		
% of each category	46,2%	92,3%	76,9%		
Total	13	26	39		
% of each choice	33,30%	66,70%	100,0%		
	100,00%	100,00%	100,0%		
	Value	Df	Asymp.Sig (2- sided)	Approx.Sig	
Pearson Chi – Square	10.400 <sup>b</sup>	1	0,001		
Nominal by Nominal (Phi)	0,516			0,001	

Notes: a- Computed only for a 2x2 table.

b- 1 cell (25%) have expected count less than 5. The minimum expected count is 3,00.
c- Not assuming the null hypothesis.

d- Using the asymptotic standard error assuming the null hypothesis

## TABLE 8A

# Symmetric Measures:

		Value	Approx. Sig.
Nominal by Nominal	Phi	0.516	0.001
	Cramer's V	0.516	0.001
	Contingency Coefficient	0.459	0.001
Number o	f Valid Cases	39	

# TABLE 8B

## Kruskal-Wallis test statistics

H'=10,135	critical value=6,6349
level of significance=0,01	degree of freedom=1

## TABLE 9

Refer to the sales (expressed in euros) of your company	Do you bel to publish	Total		
	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
0 - 3,000,000			15	15
euros	c.			
% of each choice			100,00%	100,00%
% of sales category			53,60%	38,50%
3,000,001 -	2	4	9	15
9.000.000	13,30%	26,70%	60,00%	100,00%
curos	40%	66,70%	32,10%	38,50%
More than	3	2	4	9
9.000.000	33,30%	22,20%	44,40%	100,00%
euros	60%	33,30%	14,30%	23,10%
Total	5	6	28	39

continues

Refer to the sales (expressed	Do you bel to publish	Total		
in euros) of your company	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
% of each choice	12,80%	15,40%	71,80%	100,00%
	100,00%	100,00%	100,00%	100,00%
	Value	Df	Asymp. Sig. (2 - sided)	Approx. Sig.
Pearson Chi - Square	11.593ª	4	0,021	
Nominal by Nominal (Phi)	0,545	0		0,021

Note: 6 cells (66,7%) have expected count less than 5. The minimum expected count is 1,15.

## TABLE 9A

# Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	0.545	0.021
	Cramer's V	0.386	0.021
	Contingency Coefficient	0.479	0.021
Number of Valid Cases		39	

## TABLE 9B

## Kruskal-Wallis test statictics

H'=10,046	critical value=9,21034
level of significance=0,01	degree of freedom=2

56

Number of employees	Do you be you to publish	Total		
	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
0 - 50		2	19	21
% of each choice		9,5%	90,50%	100,00%
% of employee category		33,30%	67,90%	53,80%
51 - 250	4	1	3	8
% of each choice	13,30%	12,50%	37,50%	100,00%
% of employee category	40%	16,70%	10,70%	20,50%
251 - 400	1	2	2	5
% of each choice	33,30%	40,00%	40,00%	100,00%
% of employee category	60%	33,30%	7,10%	12,80%
More than 400		1	4	5
% of each choice		20,00%	80,00%	100,00%
% of employee category		16,70%	14,30%	12,80%
Total	5	6	28	39
% of each choice	12,80%	15,40%	71,80%	100,00%
	100,00%	100,00%	100,00%	100,00%
	Value	Df	Asymp. Sig. (2 - sided)	Approx. Sig.
Pearson Chi - Square	17.793a	6	0,007	
Nominal by Nominal (Phi)	0,675			0,007

TABLE 10

Note: 10 cells (83,3%) have expected count less than 5. The minimum expected count is 0,64.

# TABLE 10A

# Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	0.675	0.007
	Cramer's V	0.478	0.007
	Contingency Coefficient	0.560	0.007
Number of Valid Cases		39	

## TABLE 10B

## Kruskal-Wallis test statictics

H'=12,347	critical value=11,3449
level of significance=0,01	degree of freedom= $3$

## TABLE 11

Which is the activity of your company	Do you believe that it is possible for you to publish annual reports based on IFRS			Total
	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
Commerce	1		7	8
% of each choice	12,50%		87,50%	100,00%
% of industry category	20,00%		25,00%	20,50%
Manufacturing	3	6	14	23
% of each choice	13,30%	26,10%	60,00%	100,00%
% of industry category	60%	100,00%	32,10%	38,50%

58

continues

Which is the activity of your company	Do you believe that it is possible for you to publish annual reports based on IFRS			Total
	We will surely do it for the year 2003	We will probably do it for the year 2003	We will definitely not do it for the year 2003	
Service company	1		7	8
% of each choice	12,50%	1	87,50%	100,00%
% of industry category	20%		25,00%	20.55.108%
Total	5	6	28	39
% of each choice	12,80%	15,40%	71,80%	100,00%
	100,00%	100,00%	100,00%	100,00%
	Value	Df	Asymp. Sig. (2 - sided)	Approx. Sig.
Pearson Chi - Square	5,108	4	0,276	
Nominal by Nominal (Phi)	0,362			0,276

# TABLE 11A

# Symmetric Measures

	a the terminer	Value	Approx. Sig.
Nominal by Nominal	Phi	0.362	0.276
	Cramer's V	0.256	0.276
	Contingency Coefficient	0.340	0.276
Number of Valid Cases	i.	39	

### TABLE 11B

#### Kruskal-Wallis test statictics

H'=2,41	critical value=9,21034
level of significance=0,01	degree of freedom=2

The assumption of homogeneity is checked using the Kruskal-Wallis test. Kruskal-Wallis test is a nonparametric equivalent to one-way ANOVA. Tests whether several independent samples are from the same population.

Hence, the following

Ho= We examine whether two, three or four samples are from the same population. In other words we test the samples for homogeneity.

TABLE 7B (similarly 8B, 9B, 10B, 11B) reports results of Kruskal-Wallis homogeneity tests.

We estimate (TABLE 7B) the H'=alternative hypothesis: H=9,3025 and C=0,6246 H'=H $\chi$ C=9,3025 $\chi$ 0,6246=14,893

We see that the critical value of chi-square distribution for the level of significance 0,01 with 1 degree of freedom is 6,6349. Thus the null hypothesis is rejected since our Kruskal-Wallis test statistics is 14,893 (related table 7B) and is much greater than the tabulated critical value. The rejection of Ho=null hypothesis at first stage means that the samples are not from the same population. In other words the homogeneity test confirms that listed companies behave differently than non-listed companies.

The same results and conclusions (rejecting the null hypothesis) arised from the Kruskal-Wallis test statistics (related table 8B,9B,10B) showing that the samples are from different population. In other words the two, three or four samples have answered in a different way.

Only in the case of table 11B we can not reject the null hypothesis, because H'=2,41 is smaller than 9,21034 (critical value of chi-square distribution) at the 0,01 significance level with 2 degrees of freedom. This conclusion means that, no matter in which activity companies were classified (commerce, manufacturing or service industry), they behave in the same manner and answer in the same way.

### 5. Discussion

The main object of this research is to examine accounting harmonization through a sample of companies with regard to the use of IFRS.

In an earlier monograph, Street and Gray (2001) introduced the following characteristics as independent variables: Listing status, size, profitability, type of auditor, how accounting policy refers to IFRS, how audit opinion refers to IFRS, whether the audit opinion indicates the audit was based on International Standards of Auditing (ISA), country of domicile, extent of multinationality and size of the domestic capital market.

More specifically, with regard to compliance with IFRS disclosure requirements, the results from Table 7 suggest that listed companies have a positive attitude towards the use of IFRS and their ability to publish annual reports, with only 22.2% feeling unprepared to publish annual reports based on IFRS.

To check the correlation, we need only look at the chi-square and symmetric measures tests. In the chi-square tests (included in table 7) the statistical significance is less than 0.05 and consequently we can say that there is correlation between the questions. Symmetric measures testing (also included in table 7) gives the same result, again with a statistical significance of less than 0.05.

In line with Street and Bryant (2000) and Street and Gray (2001), this finding consistently indicates a significant association between listing status and compliance with IFRS disclosures.

According to Table 7, the chi-square tests show a statistical significance of less than 0.05 and apparent correlation between the two variables. The symmetric square, on the other hand, shows a value midway between 0 and 1 and a correlation that is present but weak. This result may be due to the fact that there were three times more non-listed than listed companies, but even so it shows that a correlation does exist. This positive result derives from the statistical significance in the same table, which is also less than 0.05.

In Table 8 we see that 77.8% of the listed companies wanted their senior accounting staff to attend a special course on IFRS, while 22.2% of these companies had not sent their accountants for such training. Further, we see that 20.0% of non-listed companies have had their senior staff trained in IFRS, while the vast majority (80.0%) have not. As was expected, listed companies displayed greater interest in IFRS training for their staff than non-listed companies, because this is an essential market requirement.

Checking for possible correlations with regard to participation in IFRS seminars, we see that 53.8% of the positive answers came from listed companies and 46.2% from non-listed ones (Table 8). These results are conditioned by the fact that the number of completed questionnaires from non-listed companies was three times that from listed ones. If the numbers of listed and non-listed companies were the same, the percentage of positive answers (accounting staff attending a special IFRS seminar) would be bigger for listed companies.

In the same way, the cross tabulation (2) of negative participation given in table 8 shows that only 7.7% of listed company staff have not attended a special course on IFRS, compared to 92.3% of non-listed company staff. These findings suggest that non-listed companies appear to be under less pressure to comply fully with IFRS required disclosures. Remembering the obligation for listed companies to prepare consolidated financial statements based on IFRS by 2003, it is apparent that their accounting staffs must have undertaken the analogous preparation.

Table 9 shows that low-turnover companies will definitely not publish annual reports based on IAS. Most companies with sales in the 3-9 million euros range will not publish annual reports either, but there is a small percentage (13.3%) that will certainly do so and another 26.7% that will probably do so. By contrast, 33.3% of companies with sales of more than 9 million euros believe that they will manage to publish annual reports based on IFRS, while 22.2% of large companies will probably do so. Another 44.4% think that they will definitely not manage to do so. Overall, 60.0% of definite yes answers come from companies with sales of more than 9 million euros and 40.0% from those with sales of 3-9 million euros, while 33.3% of probable yes answers come from companies with sales of more than 9 million euros and 66.7% from those with sales of 3-9 million euros. This is because these two categories include companies listed on the Athens Stock Exchange and large non-listed companies that want their senior staff to be well informed. Finally, 53.6% of definite negative answers come from small companies, 32.1% from medium-sized ones and 14.3% from large ones.

Unfortunately there is no generally accepted definition of what constitutes a small company. The Bolton Committee (1971) took the view that it depended upon the sector in question; what was perceived as small in manufacturing would be considered to be quite large in the construction industry.

According to EU LI07/30.4.96, small and medium-sized enterprises are those that employ less than 250 persons and realize an annual turnover of less

62

than 40 million euros. So, we use the classification of enterprises (small, medium, large) which was adopted by the EU.

Several studies, including Chow and Wong-Boren (1987), Cooke (1989, 1991) and Meek, Roberts and Gray (1995), have identified a positively significant link between company size and level of disclosure. Our findings support the hypothesis of a positive correlation between company size and degree of compliance with IFRS -required disclosure. This hypothesis was also tested by Street and Gray (2001), and was shown to apply chiefly to large companies and to a lesser degree to medium-sized ones.

Chi-square and symmetric measures testing show that turnover influences the ability to publish annual reports based on IFRS, the significance level being less than 0.05. Furthermore, the results (Table 10) show that 67.9% of the definite negative responses to the question about ability to publish annual reports based on IFRS come from small companies, 10.5% from medium-sized companies, 7.1% from large companies and 14.3% from very large companies.

Substituting number of employees for turnover as a measure of company size yields results largely similar to the previous ones (Table 10). In this cross tabulation (Table 10), we see once again that the level of significance of chisquare and symmetric measures is less than 0.05, the obvious correlation between the number of employees and the company's ability to use IFRS reflecting the fact that a large workforce indicates a large company, and likely a listed one.

The results from Table 11 show no correlation between the two variables. This table showed that 12.5% of commercial companies feel extremely ready to publish annual reports based on IAS and 87.5% extremely uncertain about doing so. For manufacturing companies the figures are: extremely unsure (60.9%), probably sure (26.1%) and extremely sure (13.0%). As for service companies, 12.5% feel extremely sure of publishing annual reports based on IFRS and 87.5% extremely unsure. Further exploration of this field continued to yield strange results, seeing that 100.0% of the companies indicating a probability of publishing annual reports were from the manufacturing sector. 20.0% of extremely sure responses were from commercial firms, 60.0% from manufacturing concerns and 20.0% from services companies. Similarly, 25.0% of extremely unsure responses were from commercial companies, 50.0% from manufacturing firms and 25.0% from businesses in the services sector.

Both chi-square and symmetric measures tests showed significance levels of more than 0.05, so there is no correlation.

In addition to the correlation results above, it is also interesting to note (Table 11) that the kind of company activity does not presuppose a difference in the manner of publication of IFRS -based annual reports.

Earlier research yields mixed results regarding the correlation between the type of industry and the level of disclosure (Cooke, 1991, 1992; Inchausti, 1997). Inchausti (1997) provides no evidence of any association. Street and Gray (2001) provide some evidence that level of disclosure in compliance with IFRS requirements may be associated with the type of industry (existing in the transportation, communications and electronics sectors).

In our research, none of the companies whose questionnaires were examined were classified as transportation, communications or electronics industries.

#### 6. Conclusions

It is glaringly obvious from the results that knowledge about IFRS is generally poor and that companies are not adequately prepared to implement IFRS in 2003.

A study conducted by Dumontier and Raffournier (1998) with Swiss data reveals that early adopters of IFRS' are larger, more internationally diversified, less capital intensive and have a more diffuse ownership. We have to realize that Greek companies don't fulfill in a satisfactory degree all the above mentioned characteristics. So, these arguments can be used as a reason to explain that the degree of harmonization in the use of IFRS in Greece was far from the desired level in 2003, the year in which this research was conducted. Additionally, we can conclude easily why the questioned Greek companies have difficulties in partial to override the problems arised from the early enforcement of IFRS as being first users (early adopters).

Our research yields several conclusions. Claimed use of IFRS is consistently low among all sizes of firm; however, the extent of use varies significantly according to the size and listing status of the firm.

Other conclusions, similar to those of our research, have popped out of the results of the research application of the IFRS, which has been done by Grant Thornton in cooperation with the Athens University of Economics in November 2003. 105 companies listed in the ASE replied to this research. It has been ascer-

### 64

tained that the International Financial Reporting Standards (IFRS) have not been fully assimilated by the executives of the Greek companies and only the theoretical approach of the IFRS has one out of two. Besides on 5% of the Greek companies have gone through all the adjustments of their special IFRS application software. 44% of them is still at the point of preparing discussions. It is intelligible then, that the preparedness point of these companies is at a very low level.

Our research shows that the degree of harmonization in the use of IFRS in Greece is far from the desired level. An off-the-cuff indicator of the level of harmonization applicable to the case of Greece is the size of the domestic capital market (Street and Gray, 2002).

The major findings of this research on the discovery of a significant positive correlation focused between compliance with IFRS and companies either listed on the ASE or classed (by turnover and number of employees) as large or medium-sized.

The answers also reveal a lack of experience with and knowledge of IFRS among accountants.

The frequency and number of accounting staff attending special courses on IFRS justify the optimistic view that the extent of compliance in Greece is improving. On the other hand, it seems to us that knowledge of the differences between Local Accounting Standards and International Financial Reporting Standards is more useful in allowing accounting staff to make up lost time.

#### References

- Archer, S., Delvaille, P. and McLeay, S. (1995), The measurement of harmonization and the comparability of financial statement items: within - country and between - country effects. Accounting and Business Research, 25 (98): 67-80.
- Archer, S., Delvaille, P. and McLeay, S. (1996), A statistical model of international accounting harmonization Abacus, 32 (1) : 1-29.
- Brown, P. and Tarca, A. (2005), A commentary on issues relating to the enforcement of International Financial Reporting Standards in the EU, European Accounting Review, 14(1): 181-212.
- Cairns, D. (1997), The future shape of harmonization: a reply, European Accounting Review, 6(2): 305-348.

Cairns, D. (1997, October 2), IFAC: 20 years on. World Accounting Report.

Cairns, D. (2003), Plenary address, EAA Conference, Seville, 9 April.

Cairns, D. (2003), Convergence Handbook Update (London:ICAEW).

- Canibano, L., and Mora, A. (2000), Evaluating the statistical significance of de facto accounting, harmonization: a study of European global players, European Accounting Review, 9(3) 349-369.
- Chow, C.W. Wong-Boren, A. (1987), Voluntary financial disclosure by Mexican corporations, The Accounting Review, 62 (3) : 533-541.
- Cooke, T. (1989), Disclosure in the corporate annual reports of Swedish companies, Accounting and Business Research, 19 (74) : 113-124.
- Cooke, T. (1991), An assessment of voluntary disclosure in annual reports of Japanese corporations, International Journal of Accounting, 26 (3) : 174-189.
- Cooke, T., (1992), The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. Accounting and Business Research, 22 (87): 229-237.
- Dao, T.H.P. (2005), Monitoring Compliance with IFRS: Some Insights from the French Regulatory System, Accounting in Europe, vol.2: 107-135.
- Day, J. and Taylor, P. (2005), Accession to the European Union and the Process of Accounting and Audit Reform, Accounting in Europe, vol.2: 3-21.
- Delvaille, P. Ebbers, G. and Saccon, C. (2005), International Financial Reporting Convergence: Evidence from Three Continental European Countries, Accounting in Europe, vol. 2: 137-164.
- Doupnik, S. and Taylor, M.E. (1985), An empirical investigation of the observance of IASC standards in Western Europe, Management International Review, 25 (1) : 27-33.
- Dumontier, P. and Raffournier, B. (1998), Why firms comply voluntarily with IAS, Journal of International Financial Management and Accounting, 9(3): 216-245.
- Emenyonu, E.N. and Gray, S.J. (1992), EC accounting harmonization: an empirical study of measurement practices in France, Germany and the UK, Accounting and Business Research, 89: 49-58.
- Epps, R.W. and Oh, J.W. (1997), Market perception of foreign financial reports: differential earnings response coefficients between US and foreign GAAP, Journal of International Accounting, Auditing and Taxation 6: 49-74.
- European Commission (1995), Accounting harmonization: a new strategy vis à vis international harmonization, COM 95 (508).
- European Commission (2001), EU Commission Proposes Requirement for Listed Companies to Use IAS by 2005. <u>http://europa.eu.int</u> February 16
- European Commission (EC) 2002 Regulation (EC) No. 1606/2002, 19 July. Available at: <u>http://europa.eu.int/smartapi/cgi/sga\_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=\_en</u> &numdoc=32002R1606&model=guichett

- Evans, L. Gebhardt, G. Hoogendoorn, M. Marton, J. Di Pietra, R. Mora, A. Thinggard, F. Vehmanen, P. and Wagenhofer, A. (2005), Problems and Opportunities of an International Financial Reporting Standard for Small and Medium-sized Entities. The EAA FRSC's Comment on the IASB's Discussion Paper, Accounting in Europe, vol.2: 23-45.
- Federation des Expertes Comptables Européens (FEE)(1999), Discussion paper on financial reporting strategy within Europe, October. Available at:
- Flower, J. (1997), The future shape of harmonization: the EU versus the IASC versus the SEC, European Accounting Review, 6(2): 281-303.
- Flower, J. (2004), Global Financial Reporting (Basingstoke: Palgrave)
- Garcia Benau, M.A. (1994), Armonizacion de la informacion financiera on Europa, Madrid: ICAC.
- Garrod, N. And Sieringhaus, I. (1995), European Union accounting harmonization: the case of leased assets in the United Kingdom and Germany. European Accounting Review, 4 (1): 155-64.
- Gelard, G. (2004), What can be expected from Accounting Standards?, Accounting in Europe, vol.1: 17-20.
- Giner, B. and Rees, W. (2005), The adoption of IAS in Europe: Introduction, European Accounting Review, 14(1):95-99.
- Gray, S.J., Meek, G.K., & Roberts, C.B. (1995), International capital market pressures and voluntary annual report disclosures by U.S. and U.K. multi - nationals, Journal of International Financial Management and Accounting, 6 (1), 43-68.
- Hague, I. (2004), IAS 39: Underlying Principles, Accounting in Europe, vol. 1: 21-26.
- Haller, A. (2002), Financial accounting developments in the European Union: past events and future prospects, European Accounting Review, 11(1): 153-190.
- Haller, A. and Eierle, B. (2004), The adaptation of German Accounting Rules to IFRS: A Legislative Balancing Act, Accounting in Europe, vol. 1: 27-50.
- Harding, F. (2000), What is the role of Europe in an increasingly harmonized world?, European Accounting Review, 9(4): 593-601.
- Herrmann, D. and Thomas, W. (1995), Harmonization of accounting measurement practices in the European Community. Accounting and Business Research, 25 (100): 253-265.
- Hoarau, C. (1995), International accounting harmonization, American hegemony or mutual recognition with benchmarks? European Accounting Review, 4: 217-233.
- IASB (2005a), IASB issues staff questionnaire on recognition and measurement principles for small entities, Press Release, 5 April. Available at: <u>http://www.iasb.org/news/press.asp</u>.
- IASB (2005b), Staff questionnaire on possible recognition and measurement modifications for small and medium-sized entities (SMEs), 5 April. Available at: <u>http://www.iasb.org/news/press.asp</u>.

- Inchausti, B. (1997), The influence of company characteristics and accounting regulation on information disclosed by Spanish firms, European Accounting Review, 6 (1) : 45-68.
- IOSCO (2000a), Resolution concerning the Use of IASC Standards for the Purpose of Facilitating Multinational Securities Offerings and Cross Border Listings. Sydney, Australia, May 17.
- Jermakowicz, E. (2004), Effects of Adoption of International Financial Reporting Standards in Belgium: The Evidence from BEL-20 Companies, Accounting in Europe, vol.1: 51-70.
- Jones, T. and Luther, R. (2005), Anticipating the Impact of IFRS on the Management of German Manufacturing Companies: Some Observations from a British Perspective, Accounting in Europe, vol.2: 165-193.
- Krisement, V. (1997), An approach for measuring the degree of comparability of financial accounting information. European Accounting Review, 6 (3) : 465-85.
- Lainez Gadea, J.A., Callao Gaston, S and Jarne Jarne, J.L. (1996), Informacion exigida por las boisas de valores: analisis empirico de la armonizacion internacional, Revista Espanola de Financiacion y Contabilidad, 25 (86): 35-56.
- Lainez Gadea, J.A., Callao Gaston, S. and Jarne Jarne, J.I. (1997), Accounting diversity versus international accounting harmonization. Empirical evidence. Paper presented at the Annual Congress of the European Accounting Association, Graz, April.
- McLeay, S., Neal, D. and Tollington, T. (1999), International standardization and harmonization: a new measurement technique, Journal of International Financial Management and Accounting, 10 (1): 42-70.
- Nair, R.D. and Frank, W.G. (1981), The harmonization of International Accounting Standards, 1973-1979. International Journal of Accounting, Fall : 61-77.
- Nobes, C. (1993), The true and fair view: requirement impact on and of the Fourth Directive. Paper presented at the EIASM Conference in Edinburgh, July 1993, University of Reading.
- Nobes, C.W. (1987), An empirical investigation of the observance of IASC standards in Western Europe: a comment. Management International Review, 27 (4) : 78-79.
- Nobes, C.W. and Parker, R. (2000), Comparative International Accounting. 6th Edit. London: Financial Times / Prentice Hall.
- Nobes, C. (1996), International Accounting Standards: Strategy. Analysis and Practice. London: Financial Times.
- Nobes, C.W. and Parker, R. (2002), Comparative International Accounting, 7<sup>th</sup> edn (Englewood Cliffs, NJ: Prentice Hall).
- Olivier, H. (2000), Challenges facing the accountancy profession, European Accounting Review, 9(4): 603-624.
- Ormrod, P. and Taylor, P. (2004), The impact of the change to International Accounting

Standards on Debt Covenants: A UK Perspective, Accounting in Europe, vol.1: 71-94.

- Pierce, A. and Weerman, P. (2000), The impact of non-disclosure on measurement of de facto harmonization: a two - country comparison. European Accounting Association Congress, Munich.
- Pirinen, P. (2005), Economic and Normative Pressures as Drivers for the Adoption of International Accounting Standards in Finland since 1976, European Accounting Review, 14(1): 213-235.
- Rahman, A., Perera, and Ganeshanandam, S. (1996), Measurement of formal harmonization in accounting: an exploratory study. Accounting and Business Research, 26 (4): 325-339.
- Richard, J. (2004), The Secret Past of Fair Value: Lessons from History Applied to the French Case, Accounting in Europe, vol.1: 95-107.
- Schipper, K. (2005), The introduction of International Accounting Standards in Europe: Implications for International Convergence, European Accounting Review, 14(1): 101-126.
- Street, D.L. and Bryant, S.M. (2000), Disclosure level and compliance with IASs : A comparison of companies with and without U.S. listings and filings, The International Journal of Accounting, 35 (3), 305-329.
- Street, D.L. and Gray, S.J. (2001), Observance of International Accounting Standards: Factors explaining non - compliance. London: ACCA Research Monograph No 74.
- Street, D.L. and Gray, S.J. (2002), Factors influencing the extent of corporate compliance with International Accounting Standards, Journal of International Accounting, Auditing and Taxation, 11, 51-76.
- Sucher, P. and Jindrichovska, I. (2004), Implementing IFRS: A Case Study of the Czech Republic, Accounting in Europe, vol.1: 109-141.
- Tay, J.S.W. and Parker, R.H. (1990), Measuring international harmonization and standardization. Abacus, 26 (1) : 71-88.
- Tay, J.S.W. and Parker, R.H. (1992), Measuring international harmonization and standardization: a reply. Abacus, 28(2) : 217-20.
- Thorell, P. and Whittington, G. (1994), The harmonization of accounting within the EU problems, perspectives and strategies, European Accounting Review, 3 (2) : 215-239.
- Tokar, M. (2005), Convergence and the Implementation of a Single Set of Global Standards: The Real-life Challenge, Accounting in Europe, vol.2: 47-68.
- Van der Tas, L.G. (1988), Measuring harmonization of financial reporting practice, Accounting and Business Research, 18 (70) : 157-169.
- Van der Tas, L.G. (1992a), Evidence of EC financial reporting practice harmonization, European Accounting Review, 1(1): 69-104.

- Van der Tas, L.G. (1992b), Measuring international harmonization and standardization: a comment, Abacus, 28(2): 211-216.
- Van Tendeloo, B. and Vanstraelen, A. (2005), Earnings Management under German GAAP versus IFRS, European Accounting Review, 14(1): 155-180.
- Vellam, I. (2004), Implementation of International Accounting Standards in Poland: Can True Convergence be Achieved in Practice?, Accounting in Europe, vol.1: 143-167.
- Walton, P. (1992), Harmonization of accounting in France and Britain: some evidence, Abacus, 28 (2) : 186-199.
- Walton, P. (2000), The future of the accounting profession in Europe, European Accounting Review, 9(4): 589-591.
- Walton, P. (2004), IAS 39: Where Different Accounting Models Collide, Accounting in Europe, vol.1: 5-16.
- Weibenberger, B. Stahl, A. and Vorstius, S. (2004), Changing from German GAAP to IFRS or US GAAP: A Survey of German Companies, Accounting in Europe, vol.1: 169-189.
- Whittington, G. (2005), The adoption of International Accounting Standards in the European Union, European Accounting Review, 14(1): 127-153.
- Wustermann, J. and Kierzek, S. (2005), Revenue Recognition under IFRS Revisited: Conceptual Models, Current Proposals and Practical Consequences, Accounting in Europe, vol.2: 69-106.