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The Value Relevance of Adopting IASB Standards in Weak Equity Countries

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Abstract

The purpose of this article is to contribute to the debate on the improvement of value relevance with the transition to IASB standards; by choosing Italy as a case study, this paper investigates this issue in weak equity countries, where the factors that have influenced the development of an accounting system are very far from the Anglo-Saxon context, and where accounting practices pursue different purposes. Using the First-Time Adoption (FTA) of IASB standards in Europe as a starting point for our research, we analyze the change from Italian to IASB accounting standards.

Our results demonstrate that the transition to IASB standards did not bring a significant improvement in the explanatory power of accounting amounts (relative value relevance). Also, the earnings and book value reconciliations have not been found to be value relevant (incremental value relevance).

Our findings support the thesis that the adoption of IASB standards is not sufficient to improve the value relevance of accounting amounts, because it depends on the particular context in which they are applied.

Keywords: value relevance, IASB standards, conservatism, first-time adoption, weak equity countries.

1 – Introduction

In recent years, the use of IASB standards has been increasing both in Europe – as a consequence of EU Regulation 1606/2002 – and in other countries of the world, which have either adopted IASB standards, or adjusted their accounting rules to these standards or else obliged listed entities to reconcile their financial statements, originally issued with domestic GAAP, to IASB standards¹.

Previous research has already dealt with the transition from domestic to IFRS accounting principles by analyzing the capital market effect of the mandatory adoption of IASB standards (Daske, Hail, Leuz, and Verdi, 2008; Armstrong, Barth, Jagolinzer and Riedl, 2010) and the value relevance comparison between different accounting systems (Callao, Jarne and

Lainez, 2007; Horton and Serafeim, 2006; Hung and Subramanyam, 2007; Gjerde, Knivsfla, and Sættem, 2008). Our paper belongs to the second group of studies, focusing on the transition on IASB standards in weak equity countries.

The IASB model could be included in a class of systems suited to strong equity markets where financial reporting is required to provide relevant information to outside shareholders, who use it in taking economic decisions (Nobes 1998, p. 169).

In Europe, however, the adoption of these accounting principles affects countries with weak equity markets, where funds are provided mainly by banks, and accounting systems are required to calculate prudent, reliable, and often taxable income (Nobes 1998, p. 169). In countries such as France, Germany and Italy, the accounting practice has been developed on the basis of taxation rules and creditor protection.

In these European Continental states, companies are controlled by families, banks or governments acting as insider shareholders who can obtain direct information with limited or no needs of public disclosure (Ali and Hwang, 2000, p. 4).

¹ In the USA, the SEC proposed (Release No. 33-8982, November 14, 2008) a Roadmap that could lead to the required use of IFRS by US issuers in 2014 if the Commission believed it to be in the public interest and for the protection of investors.

Listed entities in European countries have been obliged to issue their consolidated financial statements in accordance with IASB standards as of January 1, 2005. However, we do not believe that the adoption of standards suited to other economic systems automatically produces an improvement in the value relevance of accounting amounts.

The aim of our research is to investigate whether there is a real improvement in the value relevance of the accounting information provided with the adoption of IASB standards in countries where the factors that have influenced the development of an accounting system are very far from the Anglo-Saxon context, and where accounting practices pursue different purposes.

Our research questions are inspired by the adoption of the IASB Standards in EU, following the application of Regulation no. 1606/2002. We have compared the IASB standards with a more conservative and tax driven accounting system developed in a weak equity market.

The adoption of the new standards allows researchers to observe how the same economic event is described in financial statements applying different accounting standards. In fact, as it is well known, when issuing their consolidated financial statements for the year 2005, European entities had to reconcile the 2004 consolidated financial statements, prepared by applying domestic GAAP, to the new IASB standards.

We used Italy as a case study. Such a choice was motivated by several reasons:

1. the analysis of a single country helps avoid the problems and biases that are likely to arise from any comparison of countries having a different institutional environment (Hung and Subramanyam, 2007, p. 624);
2. Italy is an European Continental law country, whose accounting system, classified as weak equity (Nobes and Parker, 2010, p. 72), is conservative and tax driven;
3. the Italian equity market is small (if data are deflated by the size of population or economy, it is nearly half the size of Germany, 1/3 of US and 1/4 of UK) and the weight of debt on equity is very high (nearly twice as much as the US debt and 70% higher than the UK).

These features make Italy a typical European Continental country with accounting practices very different from those that have influenced the development of IASB standards.

Our results confirmed our expectation that significant value relevance improvements do not follow as a consequence of transition from Italian to IASB standards.

All the tests we have conducted show that there is neither a significant change in the explanatory power of accounting amounts nor new value-relevant

information as a result of the transition to IASB standards.

This paper contributes to existing literature because it highlights that the value relevance of Anglo-Saxon accounting models at a general level are not superior to that of Italian accounting models (Ali and Hwang, 2000), since the value relevance of accounting approaches depends on the particular context in which they are applied. Confirming previous research (Callao, Jarne and Lainez, 2007; Hung and Subramanyam, 2007), we found that the transition to IFRS in European countries with weak equity markets did not improve value relevance.

Our research could also be of interest also to:

- i. Non-European policy makers, when they will have to decide on the adoption of IASB standards in countries with weak equity markets, where funds are mainly provided by banks;
- ii. European local standard setters, when they will establish if and how to narrow differences between IASB and domestic GAAPs.

This article describes the main characteristics of the Italian accounting system (paragraph 2) and reviews the existing literature on value relevance in studies dealing with the transition from local GAAP to IASB standards (paragraph 3).

Paragraph 4 explains the research methodology, whereas paragraph 5 shows the results of our empirical research and the robustness tests.

Paragraph 6 contains the conclusions of our study and a discussion of its implications and limitations.

2 –The Italian accounting system

We assume that the accounting system is a set of financial reporting practices used to issue annual reports (Nobes and Parker, 2010, p. 29).

In usual classifications, Italy belongs to the European Continental model (Nair and Frank, 1980, p. 429; Nobes, 1998, p. 168, note 6; Ali and Hwang 2000, p. 7 table 1; Nobes and Parker, 2010, cap. 3). New classification systems, which pay more attention to important discriminating features, have included Italy in the class of countries with a weak equity market, together with Belgium, French, Germany, Austria, and Japan. The opposite class includes strong equity countries, such as the UK, the USA, Australia, Ireland, Holland, and entities of other countries that apply IFRS or US GAAP (Nobes and Parker, 2010, p. 36 and p. 72).

Accounting is a public matter in Italy, because the accounting rules are fixed by law and because the standard setter, the Italian Accounting Body (OIC) can only issue accounting principles compliant with the law.

Italian firms, with few exceptions, are family owned, small or medium sized enterprises.

The Italian institutional context does not encourage the demand for public information for investors, but fosters the implementation of accounting rules based on the principle of prudence in order to avoid an overstatement of earnings and equities.

For the purposes of our research, we believe it useful to describe the Italian accounting system on the basis of:

1. the influence of tax rules on Italian financial reporting practices;
2. the differences between Italian and IASB rules;
3. the features of the equity market and the enforcement system in Italy.

The high level of tax interferences in the preparation of financial statements defines Italy as a tax-driven country. This definition can be inferred from article 109, paragraph 4, point 1 of the Income Taxes Consolidation Act (T.U.I.R.) which states that costs can reduce taxable income only if they are recognized in the income statement².

Problems arise when entities recognize costs that, according to the Italian Civil Code and accounting standards, should not be included in the income statement. This determines what in Italy is called “inverted dependence”, because the T.U.I.R. requires Italian entities to calculate the taxable income on the basis of the earnings recorded in the income statement. However, these entities often recognize costs that should not be included in financial statements.

Even when laws³ permitted entities to benefit from fiscal relief without including costs in the income statement, as one would expect, most entities continued to include all the costs they wanted to be tax deductible in their income statements.

The second topic we would like to examine is the main differences between Italian and IASB accounting rules.

Literature has highlighted that the introduction of IAS/IFRS in Italy produced «... tangible and sudden changes» (Marra, Mazzola and Prencipe, 2011, p. 210) due to the significant differences existing between Italian and IASB standards and the resistance to change experienced by the Italian accounting system.

This feature deems Italy an interesting case in which to study the effects of the transition to IASB standards.

According to the IASB framework in use at the time of FTA, the objective of the financial statements

is to provide information that can be used to make economic decisions. The focal point is the assessment of items included in the balance sheet, where there is wide use of fair value.

The Italian Civil Code, the hierarchical source of accounting rules in Italy, does not state the objective of financial statements: it only requires the true and fair view of financial information.

The focus of financial statements is on income assessment. The balance sheet does not have an autonomous meaning (Zappa, 1956, p. 463) and only needs to show investments that are not yet recovered by the economic activity of the entity⁴.

In such a context, a financial statement conservative approach has been developed during the years to protect the capital level, to support contracting activities and to provide a net income useful to calculate income taxes.

This vast difference in purposes produces rules that do not allow the application of the fair value to the balance sheet items that are recorded at their historical cost, and amortized.

In very few cases the fair value is disclosed in financial notes, under the requirements of the EU directives when firms have the financial instruments at their disposal. In other words, this is not a result of a new accounting approach.

The list below summarizes the main differences between IFRS and Italian standards.

Topic	Differences
Goodwill	IFRSs do not allow amortization of goodwill and require the impairment test. ITAGAAPs require the amortization of goodwill.
Intangible assets	IFRSs allow entities to choose between cost model and revaluation model. The latter model is allowed only if the intangible asset is traded in an active market. ITAGAAPs allow only the cost model.
Property, Plant and Equipment	IFRSs allow entities to choose between cost model and revaluation model. ITAGAAPs only allow the cost model.
Investment Property	IFRSs allow entities to choose between cost model and fair value model. ITAGAAPs only allow the cost model.
Inventories	IFRSs require to use FIFO or

² This deduction is allowed only for entities using IASB standards when the recognition is done not in the income statement but directly in the balance sheet. Article 109 of T.U.I.R. (paragraph 4, point b) also allows to benefit from a tax allowance for costs that cannot be recognized in the income statement but that are tax-deductible because of law provisions.

³ Law 344/2003 now abolished.

⁴ See also Capaldo (1998) and Cavalieri and Ferraris Franceschi (2010).

	weighted average cost formula and forbid using LIFO. ITAGAAPs allow FIFO, weighted average cost formula, and LIFO that is the most used because of fiscal reasons.
Financial instruments	IFRSs require the use of fair value for financial assets held for trading, available for sales, and for which entities have opted for the “fair value option” (at the time of writing, the new standard has not been endorsed yet). ITAGAAPs do not allow the use of fair value to evaluate financial instruments, and require the cost model. In many cases, firms are required to disclose the fair value in notes.
Business combinations	IFRSs require to measure the identifiable assets acquired and liabilities assumed at their acquisition-date fair value. ITAGAAPs require to measure the identifiable assets acquired and liabilities assumed at the value they had before the business combinations.
Provisions	IFRSs do not allow the recognition of provisions for obligations which were inexistent at the issue date. ITAGAAPs allow this kind of provision.
Agriculture	IFRSs require the fair value measurement of biological assets and of agriculture produce. An exception is allowed for biological assets that could be valued at their cost, less accumulated depreciation, when the fair value cannot be reliably determined. ITAGAAPs do not allow the use of fair value to evaluate biological assets.

The description of the equity market and the enforcement system – point 3) – complete our analysis

of the Italian accounting system. In 2004, the Italian market, just as many other European markets, started to get out of a financial crisis.

The MIB 30 Index Points, in fact, fell down from 32,375 (November 8, 2000) to 15,645 (March 31, 2003), undergoing a 52% reduction, and started to rise at the end of 2003. This Index was equal to 19,483 at January 1, 2004 and to 22,886 at December 31, 2004.

As of 30 December 2004, a total of 225 entities were listed (219 Italian companies and 6 foreign companies), with a total market capitalization of 580,881 EUR millions.

Main data referring to Italian market are illustrated in Table 1.

The enforcement of financial reporting rules for listed companies is carried out by CONSOB (the Italian National Commission for Listed Companies and the Stock Exchange), established in 1974 and modeled on SEC.

Enforcement rules are established by the *Testo Unico della Finanza* (Consolidated Act of Finance), as updated in 2007 to comply with the “Transparency Directive” 2004/109/CE.

CONSOB’s powers can be better explained by distinguishing those used towards listed entities from those exerted on auditors. Its most effective power is the possibility to suspend the trading of securities.

CONSOB can require listed entities to disclosure new information, correct previous information communicated to the market (art. 114 TUF), and require listed entities to communicate reserved information only to CONSOB (art. 115 TUF). It can also question the validity of financial statements (art. 157) if they are not compliant with accounting rules.

Compliance with the accounting rules is monitored by audit firms that are listed in a Special Register called “*Albo Speciale CONSOB*”, where only entities with a minimum level of administrative structure, quality know-how, and honorability of their managers can be included. CONSOB has the duty to control audit quality and independency almost every three years (art. 162). To comply with this requirement it can:

- ask for information and data;
- make inspections;
- reverse mandate in progress;
- forbid the acceptance of new mandates;
- cancel audit firms from the Special Register in case of serious breaches of the rules.

Table 1 – Main Market Indicators

Listed Entities	Number (December 2004)	Number of contracts (2004)	Value of contracts (ML of Euros) (2004)
Italian Listed Entities	219	28,124,591	641,376.3
Foreign Listed Entities	6	2,976,025	71,557.7
	225	31,100,616	712,932.9

Source: Borsa Italiana

Entities listed either in the New Market (40) or in the Expandi Market (13) are not considered.

At the time of writing there are 22 audit firms recorded in CONSOB's Special Register.

Auditors working in Italy, as in most countries, do not have a sufficient level of independency, mainly because they are chosen directly from audited entities that have the only limit to change auditors every nine years. This lack of independency is higher for auditors that are not one of the Big 4 (Deloitte, KPMG, Price Waterhouse Coopers and Ernst & Young), whose total revenues could be highly affected by a single contract with a listed firm.

We should also consider that auditors different from the Big 4 have only recently appeared in Italy; therefore, they cannot be compared to the Big 4 in terms of experience and knowledge. This implies that the statements they have audited are less reliable than those monitored by the Big 4.

The Italian scare law enforcement level might affect the quality of financial information (Hope, 2003) and make Italy similar to countries such as Spain, Portugal, and Germany, where accounting practices have been developed pursuing purposes deeply different from those inspiring the IASB model.

This feature should be taken into consideration in the analysis of accounting data because, as other authors have pointed out, while differences in accounting recognition and measurement are diminishing, enforcement continues to differ significantly across countries (Hope, 2003, p. 238).

3 –Literature review

As explained in the introduction, we investigate whether there is a real improvement in the value relevance of accounting information in weak equity countries as a consequence of adopting IASB standards. Therefore, in this section, after a brief description of studies that deal with value relevance at a general level, we will describe studies that investigate the value relevance of the transition from local GAAP to IASB standards and we will describe how our research is different from that of previous studies.

With the expression “value relevance” we refer to the ability of accounting amounts to reflect the underlying economic value of the firm (Hung and Subramanyam, 2007, p. 639), measured by stock market prices as a synthesis of market participants' beliefs about future cash flows and discount rates; therefore, accounting amounts are value relevant if they are associated with stock prices and value relevance research assesses how well accounting amounts reflect information used by investors (Barth, Beaver and Landsman, 2001, p. 77).

The wide diffusion of value relevance studies has generated a need to classify them.

The most used classification distinguishes these studies (Biddle, Seow and Siegel, 1995; Hung and Subramanyam, 2007, p. 642) into:

1. Relative value relevance research, which compares two or more accounting systems, referring to the different ability of their accounting amounts to show information content in stock prices;
2. Incremental value relevance research, which evaluates the ability of an accounting measure to provide larger information content than that assumed as given.

Dealing with the value relevance research on comprehensive income, Van Cauwenberge and De Beelde (2010, p. 84) distinguish the following:

1. Relative association studies that compare the association between prices (or returns) and alternative income measures (net income or comprehensive income). The income measure with the most significant earnings response coefficient (ERC) or the highest adjusted R^2 is assumed to be most value relevant.
2. Incremental value relevance studies that examine whether other comprehensive income (OCI) components, once added to net income, improve the value relevance. These works of research are conducted through an examination of whether the OCI coefficients are significantly different from zero or through an analysis of whether the adjusted R^2 increases with the inclusion of other comprehensive income components.

On this topic, Holthausen and Watts (2001, pp. 5-6) proposed a partially different classification, by adding a new category and dividing studies dealing with value relevance into:

1. Relative association studies, which compare the association between prices (or changes in prices) and alternative accounting measures;
2. Incremental association studies, which investigate whether accounting numbers are useful in explaining prices or returns, assuming other accounting amounts as given;
3. Marginal information content studies, which investigate whether a particular accounting number adds relevant information for investors. Unlike incremental association research, these analysis use event studies to determine whether the release of an accounting number is associated with price changes.

Several studies have dealt with the value relevance of reconciliation amounts between domestic and IASB standards.

Lin and Chen (2005) analyzed the value relevance of the reconciliation from the Chinese GAAP to IASB standards required for Chinese listed compa-

nies. Their results were not particularly encouraging for IASB standards, because they found the Chinese GAAP more value relevant than IASB standards⁵. Similar results were found by Niskanen, Kinnunen, and Kasanen (2000), who analyzed the reconciliation of 18 firms from the Finnish accounting standards to international accounting standards in the period 1984-1992. Indeed, they found such reconciliation irrelevant.

However, such studies have investigated only the value relevance of reconciliation amounts, not a transition from domestic to international accounting standards.

Research that deals with the value relevance of a transition from domestic to IASB standards has been widely developed, beginning with EU Regulation 1606/2002.

Among these studies the article by Callao, Jarne and Lainez (2007) is particularly interesting for its analysis of the First-Time Adoption of IASB standards in Spain whose firms share the same business environment as the Italian entities analyzed in this paper.

This is of particular interest for our purpose, because Callao et al's article deals with the change from a public regulatory system, with scant input from the private sector (Callao, Jarne and Lainez, 2007, p. 149), typical of Continental European countries, to an Anglo-Saxon system as the IASB model.

This study analyzed whether the change from Spanish accounting principles to IAS/IFRS produced statistically significant differences. In their analysis of the impact of such a change, the authors obtained different results depending on the accounting amount taken into consideration (Callao, Jarne and Lainez, 2007, pp. 160-161).

With reference to the value relevance, the study analyzed whether there were significant differences in the book to market ratio produced by the application of IASB or Spanish standards.

More specifically, they found that there had been no improvement in the relevance from changing to IASB standards, because these standards increased the difference between the book and market values.

Hung and Subramanyam (2007) examined the voluntary transition from domestic to IASB principles chosen by some German entities during the period 1998-2002, in order to evaluate the possible effect of the mandatory transition that was due in 2005, as a consequence of EU Regulation 1606/2002. This study directly compared domestic and IASB accounting

amounts, because for the year before the adoption, German entities had to issue their financial statements both with domestic and IASB standards.

The authors in this research also found that domestic GAAPs were more value relevant than IASB standards, highlighting that the book value estimated under IASB standards was higher than the book value under German standards.

Gjerde, Knivsfla, and Sættem (2008) analyzed 145 reconciliations from Norwegian standards to IASB standards in the year 2004. They found that the value relevance of key accounting amounts prepared in compliance with IASB standards was not superior to the corresponding amounts reported according to the Norwegian standards; however, they found that equity and normalized net operating income reported in accordance with IASB standards were on the margin more value relevant than corresponding Norwegian amounts.

A study conducted by Horton and Serafeim (2006) on UK firms obtained partially different results. The authors analyzed the reconciliations implemented by 85 firms and found that they were value relevant for the earnings, but not for the book values.

Even though such studies deal with the value relevance of the change from local to IASB standards, they cannot answer our research question for several reasons.

The research developed in Spain (Callao, Jarne and Lainez, 2007) did not apply regressions between price per share and accounting amounts and, consequently, does enable readers to make usual inferences as to relative and incremental value relevance.

Research by Horton and Serafeim (2006) refers to the U.K., a country whose accounting system is in the same class of US and IFRS (strong equity class); therefore, the comparison cannot help assess the utility of the transition for countries belonging to the weak equity class.

Hung and Subramanyam (2007) analyzed the transition from the domestic to the IFRS accounting system in Germany, a weak equity country, which is very similar to Italy as to accounting, fiscal legislation and weight of debts. Their research refers to a voluntary adoption of IASB standards before the First-Time Adoption, which makes that case different from the FTA. Moreover, the analysis was developed from 1998 through 2002 on the basis of data referring to different business (cycle) phases.

The research conducted by Gjerde, Knivsfla, and Sættem (2008) refers to the case of the First-Time Adoption in Norway. If compared to other countries, usually considered as "weak equity markets", Norway reveals a very low debt in equity funding and a market size which is, according to the *Domestic Firms-to-Population Ratio*, very close to market dimensions of the UK and Canada (which are market oriented countries). Moreover, the Norwegian market is larger than

⁵ To be accurate, the research was done by analyzing both the A-shares market and the B-shares market. While for the B-shares market they found a better value relevance for the Chinese accounting principles, for the A-shares market they found similar results, with the limited exception of the book value, which was not value relevant.

the markets in bank oriented countries: it is ten times the Italian market, seven times the German market and four times the French market (Ali and Hwang, 2000, p. 7). Therefore, also Gjerde's study cannot answer our research question.

Studies have been conducted that approach the comparison of the value relevance of Italian and IASB standards (Devalle, Onali and Magarini, 2010; Pavan and Paglietti, 2011). However, such studies are distinctly different from our research, and their results are not comparable with our findings, because these researchers did not analyze the reconciliations that the listed groups had to conduct in the First-Time Adoption of IAS/IFRS accounting principles. In fact, they developed their research by comparing the value relevance of accounting amounts during the years before the transition to IASB standards with the value relevance after the transition to IASB standards.

As a result of their work, Devalle, Onali and Magarini (2010) found a decrease in the value relevance of accounting amounts – measured by the R^2 – in the post-adoption period; also earnings and book value coefficients show a decrease in the IFRS period with respect to their magnitude in the years during which the Italian standards were applied⁶.

In contrast, Pavan and Paglietti (2011) found an increase in the explanatory power of accounting amounts after the transition to IASB standards, even though when the sample was limited to industrial firms, they did not find a significant improvement in the explanatory power of accounting amounts as measured by the R^2 , which increased from 60% (pre-adoption period) to 61% (post-adoption period), with a very limited increase of 1%. However, differing from our findings, they observed also for industrial firms a significant change in coefficients, with a reduction in that of book value and an increase in that of earnings.

4 – Sample selection and research design

Our research involved Italian listed entities which, as we said in the previous sections, were obliged, starting from January 2005, to issue consolidated financial statements in accordance with IASB standards.

Our sample includes all the Italian entities that had the following features in the 2005 year:

1. they have to be listed;
2. they had to be different from financial and insurance entities;

3. they had to prepare their consolidated financial statements including all the information required for the FTA.

The first requirement was to ensure that financial statements complied with IASB standards.

The second feature was to exclude entities with particular characteristics that might have impaired the meaningfulness of the results of our research.

The third feature allows us to consider only entities that provide readers with the information we need to conduct our research.

Among the 225 listed entities, only 140 have both features 2) and 3).

We gathered financial statements issued by entities that, when issuing their 2005 consolidated financial statements, had to prepare the reconciliation from IASB to Italian standards for amounts published in 2004.

Our research was developed in three steps.

The first step analyzed whether there were statistically significant differences between amounts stemming from IASB and Italian accounting standards.

The risk is that options still present in IASB standards allow issuers to make only limited changes from previous accounting habits; if this is the case, the value relevance comparison does not make sense.

Therefore, this step could be considered a prerequisite to further development of our value relevance analysis.

We did not choose any particular item, but bottom-line amounts recorded in the income statement and in the balance sheet, because we wanted to analyze if the movement from domestic to IASB GAAPs produced a significant change in accounting amounts as a whole.

Therefore, we analyzed:

1. total assets (ta);
2. total liabilities (tl);
3. equity (eq);
4. minority interest in equity (mieq);
5. earnings (ea);
6. minorities interest in earnings (miea).

For each amount we will test if there are significant differences between IASB and Italian accounting amounts at December 31, 2004.

The second and the third steps of our research deal with our research question.

The second step involves the “relative value relevance” comparison between Italian and IASB accounting amounts and investigates whether the adoption of IASB standards leads to a significant improvement in the value relevance with the adoption of IASB standards.

This kind of analysis has been conducted by using a modified Ohlson model (1995).

Ohlson (1995) defined two valuation functions.

⁶ Devalle, Onali and Magarini (2010) found these results when they used the price regression model.

They generated opposite results when they used a return regression model. However, they observed that such findings could depend on the fact that individual effects for 110 companies are estimated through only 142 observations.

In the first, the value relevance of the firm is specified by the following equation (Ohlson, 1995, p. 669):

$$P_t = y_t + \alpha_1 x_t^a + \alpha_2 v_t$$

Where:

y_t , represents net book value at time t ;

x_t^a , represents the abnormal earnings for the period t ;

v_t , represents information other than abnormal earnings;

with

$$\alpha_1 = \omega / (R_f - \omega) > 0;$$

$$\alpha_2 = R_f / (R_f - \omega) (R_f - \gamma) > 0;$$

ω , represents the parameter that links the x_t^a with x_{t+1}^a in the following equation: $x_{t+1}^a = \omega x_t^a + v_t + \varepsilon_{1t+1}$

γ , represents the parameter that link v_t with v_{t+1} in the following equation: $v_{t+1} = \gamma v_t + \varepsilon_{2t+1}$

R_f , represents the risk-free rate plus 1.

Using the definition of x_t^a as $x_t^a = x_t - (R_f - 1)y_{t-1}$ Ohlson (1995, p. 670) derived the second valuation function described below:

$$P_t = k(\phi x_t - d_t) + (1-k)y_t + \alpha_2 v_t$$

Where

$$\phi = R_f / (R_f - 1)$$

$$k = (R_f - 1) \alpha_1$$

This last function, with modification, brings to the modified Ohlson model, where the market value (MKV) of the firms is a function of the book value (BV) and the earnings (E):

$$MKV_t = \beta_0 + \beta_1 BV_t + \beta_2 E_t + \varepsilon_t$$

To overcome problems due to the scale effect, the model is often used on a per-share basis by dividing all the variables by the number of shares⁷.

Therefore, the equation we will use becomes the following⁸:

⁷ The price-per-share version is probably the most used to compare the value relevance of domestic and IASB standards (Gjerde, Knivsfla, and Sættem, 2008; Barth, Landsman and Lang, 2008; Pavan and Paglietti, 2011). For a review of other possible solutions for the scale effect, readers can see Devalle (2010), par. 2.2.3.1.

⁸ Equation (1), as in most empirical research, does not include any proxy for "v", that is for variables other than accounting information.

Ohlson observed that «...although v_t is not directly observable, one can infer v_t from its influence on expectations ...» and «...expected earnings are no less observable than are realizations» (Ohlson 2001, p. 112). He posits " v_t " as the difference between next period's expected residual income and ωx_t^a , where ω and x_t^a have the meaning explained in the text.

$$P_{it} = \gamma_0 + \gamma_1 EPS_{it} + \gamma_2 BVPS_{it} + \varepsilon_{it} \quad (1)$$

Where:

P_{it} , represents the price per share three months after the end of the year (March 31, 2005);

EPS_{it} , represents the earning per share at the end of the year (2004);

$BVPS_{it}$, represents the book value per share at the end of the year (2004).

The reason for choosing the share price as the dependent variable is twofold. The price per share model seems to be more suitable for studies that want to investigate if the information involved in accounting amounts affects investors' choices. The returns model seems to be more suitable for research investigating the timeliness of accounting amounts, because changes in prices are a consequence of new information (Barth, Beaver and Landsman, 2001, p. 95) and they could be used to answer another kind of research questions. In addition, the price per share model makes it possible to analyze the value relevance of both stock and flows, in our case earnings and book value (Hung and Subramanyam, 2007, p. 639).

In our work we intend to regress the price per share on independent variables that are first calculated by Italian standards and then reassessed according to IASB standards. Then, as in prior studies (Biddle, Seow, and Siegel, 1995; Lev, 1989), we will measure the relative value relevance as the explanatory power of different accounting amounts by calculating the adjusted R^2 values. We will also test the significance of adjusted R^2 differences that we will find using the Cramer test.

Consistently with this approach, Veltri and Silvestri (2011) recently have included analysts' earnings forecasts in their model as a proxy for "v".

Barth, Beaver, Hand and Landsmann (2005) included "v" in their equation in order to allow for the inference of such a variable on the market value of the firms. These Authors posit "v" at the time t as the difference between the market value of equity at time $t-1$ and the fitted value of market value of equity at time $t-1$, when the fitted value is derived from this equation:

$$MVE_t = \alpha_0 + \alpha_1 NI_a + \alpha_2 BV + u_{it}$$

Where:

MVE_t , represent the market value of equity;

NI_a , represents abnormal earnings;

BV , represents the equity book value.

Recently, the approach of Barth, Beaver, Hand and Landsmann has been performed by Devalle, Onali and Magrini (2010). Unlike Barth, Beaver, Hand and Landsmann (2005), the article of Devalle, Onali and Magrini (2010) used a fixed-effect model and applied as a dependent variable the residuals of the regressions of prices on industry and cross-listing fixed effects.

Along with the comparison of the adjusted R^2 , we will measure the relative value relevance of the two sets of accounting amounts by analyzing differences in the magnitude of coefficient of BVPS and EPS, in order to verify the increase (or decrease) in value relevance of each item.

We will use the Chow test in order to verify whether the transition to IASB standards produced a structural break that changed the coefficients of EPS and BVPS.

The Chow test has been previously used in works of empirical research that compared the value relevance of domestic and IASB standards (Gjerde, Knivsfla, and Sættem, 2008; Devalle, Onali and Magarini, 2010; Pavan and Paglietti, 2011).

In our case, we will test the null hypothesis of whether the transition from Italian to IASB standards have not produced changes in EPS and BVPS coefficients.

We do not expect that the transition from local GAAP to IASB standards produces a real improvements of value relevance of accounting amounts.

Reasons behind this conviction are threefold.

First, previous research (reviewed in section three) could lead us to think that — with the exception of the UK, which is a strong equity country with characteristics far different from those of Italy — domestic standards has a greater explanatory power than IASB standards.

Second, the many options allowed by IASB standards and the Italian entities' poor level of compliance with IASB rules (Mechelli 2009) lead us to believe that accounting changes, even though statistically significant, were not so relevant.

Third, our sample does not include financial entities that a recent Italian research (Pavan and Paglietti, 2011) found the most impacted by an increase in the value relevance during the years following the adoption of IASB standards.

However, results are not so obvious because the larger use of fair value with IASB standards should narrow the difference between the book value of equity and the intrinsic value of the firm.

Moreover other authors (Ali and Hwang, 2000; Davis-Friday, Eng and Liu, 2006) have highlighted that value relevance is lower when financial statements are affected by tax rules, as in our case.

The last step of our research has included an “incremental value relevance” analysis, which was performed in order to verify the incremental explanatory power of accounting differences due to the change from Italian GAAP to IASB standards.

In our case, the incremental value relevance analyzes whether IASB reconciliations provide new information beyond Italian amounts viewed as given; by using Italy as a case study, this research allows us to verify the incremental value relevance of IASB information when compared with the information pro-

vided by a conservative accounting system developed in weak equity countries.

We will regress the price per share on book value, earnings — always per share — the difference between earning per share by IASB standards and earnings per share by Italian standards, and the difference between book value per share calculated by IASB standards and Italian standards respectively, as explained in the following equation⁹:

$$P_{it} = \delta_0 + \delta_1 \text{EPS}_{it\text{ITA}} + \delta_2 \text{BVPS}_{it\text{ITA}} + \delta_3 \Delta \text{EPS}_{it} + \delta_4 \Delta \text{BVPS}_{it} + \varepsilon_{it} \quad (2)$$

where:

ΔEPS_{it} , represents the difference between earning per share calculated by IASB standards and Italian standards;

ΔBVPS_{it} , represents the difference between book value per share calculated by IASB standards and Italian standards.

With reference to this equation, we analyzed the incremental information content of differences between IASB and Italian standards by testing if the coefficients δ_3 and δ_4 are significantly different from 0.

These results allow us to have empirical evidences of the value relevance improvement distinguishing between the information contained in the income statement and the information provided by the balance sheet.

For the same reasons exposed when dealing with the relative value relevance, we do not expect to find such reconciliations value relevant.

5 – Research results

5.1 – Main results

The first part of our research dealt with a comparison of the six bottom-line accounting amounts calculated — for the year 2004 — by using both IASB and Italian standards.

Descriptive statistics are shown in Table 2.

We first tested if the analyzed variables were normal by the Kolmogorov-Smirnov and Shapiro-Wilk tests.

As shown in Table 3, none of the accounting amounts taken into consideration had a normal distribution. Therefore, we used the Wilcoxon test to verify whether there are significant differences between IASB and Italian accounting amounts at December 31, 2004. Results of the Wilcoxon (Z statistic) test, given in Table 4, allowed us to reach some conclusions.

⁹ To adjust for heteroscedastic problems, which could bias inference results, we use errors robust to heteroscedasticity.

Table 2 – Descriptive statistics of the six key accounting amounts
(all numbers are expressed in thousands of euro)

Number: 140		Mean	Standard Deviation	Lowest value	Highest value
Year: 2004					
<i>Total Asset</i>	IASB	3,589,857	1.19E+07	20,210.35	8.18E+07
	ITA	3,645,915	1.20E+07	19,993.31	7.66E+07
<i>Total Liabilities</i>	IASB	2,551,706	8,881,693	7,285	6.10E+07
	ITA	2,533,645	8,581,104	7,296	5.67E+07
<i>Equity</i>	IASB	973,515.9	3,462,400	-110,687	3.24E+07
	ITA	972,172.6	3,579,886	-113,763	3.36E+07
<i>Minority interest in equity</i>	IASB	278,049	1,947,578	-2,985	2.20E+07
	ITA	270,119	1,881,062	-168.68	2.13E+07
<i>Earnings</i>	IASB	4,128,661	4.76E+07	-1,579,000	5.63E+08
	ITA	3,845,076	4.44E+07	-1,900,000	5.26E+08
<i>Minority interest in Earnings</i>	IASB	183,596.5	1,887,837	-102,900	2.20E+07
	ITA	188,509.6	1,920,510	-103,700	2.24E+07

Table 3 – Normal Distribution Tests

	Kolmogorov-Smirnov	Shapiro-Wilk
	<i>p-value</i>	<i>p-value</i>
<i>Total assets Ias</i>	0.000	0.000
<i>Total assets Ita</i>	0.000	0.000
<i>Total liabilities Ias</i>	0.000	0.000
<i>Total liabilities Ita</i>	0.000	0.000
<i>Equity Ias</i>	0.000	0.000
<i>Equity Ita</i>	0.000	0.000
<i>Minority interest in equity Ias</i>	0.000	0.000
<i>Minority interest in equity Ita</i>	0.000	0.000
<i>Earning Ias</i>	0.000	0.000
<i>Earning Ita</i>	0.000	0.000
<i>Minority interest in earning Ias</i>	0.000	0.000
<i>Minority interest in earning Ita</i>	0.000	0.000

Table 4 – Wilcoxon test

	Z statistic	<i>p-value</i>
ta_ita – ta_ias	-4.343	0
tl_ita – tl_ias	-3.399	0.001
eq_ita – eq_ias	3.368	0.001
mieq_ita – mieq_ias	0.273	0.7851
ea_ita – ea_ias	-4.736	0
miea_ita – miea_ias	1.229	0.2191

Four accounting amounts – total assets, total liabilities, equity, and earnings – underwent significant changes ($p\text{-value} < 0.00$).

With reference to the minority interest in “earnings” and in “equity”, the Z statistic (1.229 and 0.273), and the relative $p\text{-value}$ (0.2191 and 0.7851) did not allow us to reject the null hypothesis that there are not significant changes.

These items, however, do not have their own significance; they only need to “adjust” equity and income shown in the consolidated financial statement, being the financial statement of the controlled entities

the source of accounting information for non-controlling interests (Moonitz, 1951, p. 12).

The significant changes found for the main accounting amounts – total assets, total liabilities, equity, and earnings – assure us that the transition from Italian to IASB standards produces two sets of accounting amounts that are useful to compare.

The second part of our research investigated the explanatory power of the two sets of accounting amounts examined in this article.

Results exposed in Table 5 show the very similarity between Italian and IASB accounting amounts with regard to their explanatory power.

Table 5 – Relative Value Relevance: Entire sample

Regression model (1)	$P_{it} = \gamma_0 + \gamma_1 EPS_{it} + \gamma_2 BVPS_{it} + \varepsilon_{it}$	
	Italian	IASB
Intercept	4.713*** (4.77)	4.652*** (4.50)
EPS	-0.038 (-0.74)	-0.039 (-0.84)
BVPS	0.929*** (3.70)	0.926*** (3.60)
Adjusted R ²	0.4141	0.4168
Cramer test	-0.049	
Chow test	0.002	

T statistics are presented in parenthesis; *, **, *** indicate statistical significance at the 10%, 5% and 1% level

The transition to IAS/IFRS produced very little improvement in the adjusted R² that moves from 41.41% with Italian standards to 41.68% with IASB standards; the Cramer test shows that such difference is not statistically significant.

Such findings are consistent with the results shown by Pavan and Paglietti (2011), who did not find a real improvement in the R² when the sample is limited to industrial firms.

Such similarity is reflected also in the coefficients of EPS and BVPS, whose differences are very little.

The coefficient of BVPS is positive and statistically significant both for the Italian (0.929) and IASB (0.926) standards. The Italian coefficient is slightly higher (0.003) than the IASB coefficient.

The earnings coefficients are very similar and negative both for Italian and IASB standards. Such results are not novel, and they have already been observed for many countries in the research by Devalle, Onali and Magarini (2010) that investigated the value relevance pre- and post-adoption of IASB standards. However, in our case, the EPS coefficient is not sta-

tistically significant either for Italian or IASB standards.

In the end, the Chow test shows that there was not a structural break with the transition from Italian to IASB standards; therefore, we cannot reject the null hypothesis that EPS and BVPS coefficients did not change with the adoption of IASB standards. This test confirms the results just exposed as to the similarity of coefficients.

Table 6 shows results of incremental value relevance that are consistent with those just exposed regarding the relative value relevance.

Table 6 – Incremental Value Relevance: Entire sample

Regression model (2)	$P_{it} = \delta_0 + \delta_1 EPS_{it}ITA + \delta_2 BVPS_{it}ITA + \delta_3 \Delta EPS_{it} + \delta_4 \Delta BVPS_{it} + \varepsilon_{it}$
	Intercept
EPSITA	0.021 (0.07)
BVPSITA	0.933*** (3.71)
Δ EPS	-0.922 (-0.21)
Δ BVPS	0.786 (0.536)
Adjusted R ²	0.4085

T statistics are presented in parenthesis; *, ** and *** indicate statistical significance at the 10%, 5% and 1% level

Both earnings and book value reconciliations are not statistically significant. These last results seem to suggest that existing differences between Italian and IASB accounting amounts are not value relevant, even though such differences are statistically significant.

5.2 –Robustness tests

Many factors could have affected our research results. Risks exist that the poor level of compliance and the possibility of choosing, among alternatives allowed by IASB standards, those not requiring change from previous habits, could bias our results; to control for such factors we first repeated our regression by only including entities audited by the Big 4, and then we only included large entities, considering as large entities those whose natural logarithm of total assets (LnA) (Van Tendeloo and Vanstraelen, 2005) is over the median.

The regression of the entities audited by the Big 4 allows us to include firms with the highest auditing quality which should ensure a sufficient level of com-

pliance. The regression of larger entities allows us to take into consideration firms with more administrative resources and more public information. Among the available options, they might choose those requiring changes in accounting practices.

Tables 7 and 8 show the results of regression (1) and (2) when the sample is limited to entities whose financial statements are audited by the Big 4, while Tables 9 and 10 show results when the sample is limited to big entities.

Table 7 – Relative Value Relevance:
Only Big 4 audited firms

<i>Regression model (1)</i>	$P_{it} = \gamma_0 + \gamma_1 \text{EPS}_{it} + \gamma_2 \text{BVPS}_{it} + \varepsilon_{it}$	
	Italian	IASB
Intercept	4.983*** (5.03)	4.936*** (4.78)
EPS	-0.037 (-0.69)	-0.038 (-0.77)
BVPS	0.897*** (3.75)	0.892*** (3.66)
Adjusted R ²	0.4021	0.4025
Cramer test	-0.007	
Chow test	0.002	

T statistics are presented in parenthesis; *, **, *** indicate statistical significance at the 10%, 5% and 1% level

Table 8 – Incremental Value Relevance:
Only Big 4 audited firms

<i>Regression model (2)</i>	$P_{it} = \delta_0 + \delta_1 \text{EPS}_{it} \text{ITA} + \delta_2 \text{BVPS}_{it} \text{ITA} + \delta_3 \Delta \text{EPS}_{it} + \delta_4 \Delta \text{BVPS}_{it} + \varepsilon_{it}$	
	Intercept	4.948*** (4.78)
EPSITA	-0.016 (-0.05)	
BVPSITA	0.898*** (3.78)	
Δ EPS	-0.361 (-0.08)	
Δ BVPS	0.508 (0.43)	
Adjusted R ²	0.3935	

T statistics are presented in parenthesis; *, **, *** indicate statistical significance at the 10%, 5% and 1% level

Results referring only to entities audited by the Big 4 confirm the close similarity of Italian and IASB standards as to the explanatory power of accounting amounts, whose difference is very little (0.04%) and not statistically significant (Cramer test -0.007).

Coefficients of book value are positive (0.897 for Italian standards; 0.892 for IASB standards), statistically significant and very similar.

Earnings coefficients still remain negative and not statistically significant.

Table 9 – Relative Value Relevance:
Only large entities

<i>Regression model (1)</i>	$P_{it} = \gamma_0 + \gamma_1 \text{EPS}_{it} + \gamma_2 \text{BVPS}_{it} + \varepsilon_{it}$	
	Italian	IASB
Intercept	5.098*** (5.16)	4.985*** (3.62)
EPS	-0.035 (-0.65)	-0.031 (-0.20)
BVPS	0.772*** (3.95)	0.770*** (6.76)
Adjusted R ²	0.3686	0.3821
Cramer test	-0.111	
Chow test	0.002	

T statistics are presented in parenthesis; *, **, *** indicate statistical significance at the 10%, 5% and 1% level

Table 10 – Incremental Value Relevance:
Only large entities

<i>Regression model (2)</i>	$P_{it} = \delta_0 + \delta_1 \text{EPS}_{it} \text{ITA} + \delta_2 \text{BVPS}_{it} \text{ITA} + \delta_3 \Delta \text{EPS}_{it} + \delta_4 \Delta \text{BVPS}_{it} + \varepsilon_{it}$	
	Intercept	4.807*** (4.50)
EPSITA	-0.067 (-0.11)	
BVPSITA	0.696*** (3.45)	
Δ EPS	0.603 (0.07)	
Δ BVPS	4.127* (1.69)	
Adjusted R ²	0.3920	

T statistics are presented in parenthesis; *, **, *** indicate statistical significance at the 10%, 5% and 1% level

The Chow test highlights that, also for entities audited by the Big 4, there was no structural break, thus confirming the substantial invariance of coefficients after the adoption of IASB standards.

As for the large sample, both the earning and book value reconciliations are not statistically significant.

In terms of results referring to large entities, Table 9 shows that the increase of the explanatory power (1.35%) measured by the adjusted R² is slightly higher than that observed for the full sample, even if such improvement still remains very poor and not statistically significant.

Other results – sign and significance of coefficients, Chow test, reconciliations of earnings and book value¹⁰ (Table 10) – are the same as that of the overall sample, confirming that, also for large entities, the transition to IASB standards did not bring a significant improvement of the value relevance.

The second test we conducted refers to the possibility that our inferences could have been affected by mean differences across industries.

To overcome this problem, following Barth, Landsman and Lang (2008), we first regress prices on industry-fixed effects, and then we regress equations (1) and (2) by using residuals of such regression (P*) as the dependent variable.

Results shown in Table 11 highlight that, also with this correction, the explanatory power of IASB and Italian amounts is very similar, even though in this case we found a little greater explanatory power in Italian amounts. Also in this case the Cramer test shows that the difference in the adjusted R² is not statistically significant.

Other results still remain the same - sign and significance of coefficients, Chow test, reconciliations of earnings and book value (Table 12) - we discovered when we used P instead of P* as a dependent variable.

The final test we conducted refers to the risk that omitted variables might bias inferences as to coefficients δ_3 and δ_4 of equation (2).

Previous researchers (Hope, 2007) pointed out the relevance of adding intercept controls for important firm characteristics. Firm size is often considered a good proxy for firm characteristics (Van der Meulen et al., 2007), because it is a good measure for risk (Barth, Beaver and Landsman, 1998), political attention (Watts and Zimmerman, 1990) and the will to provide stakeholders with more disclosures

¹⁰ The book value reconciliation (T statistics 1.69; p-value 0.096) is not significant at conventional level (p-value < 5%), but it becomes significant if we assume an higher level of acceptance (p-value < 10%). However also in this case the level of p-value (0.096) is very close to level of acceptance (p-value < 10%).

(Cuijpers and Buijink, 2005; Chow and Wong-Boren, 1987; Cooke, 1992; Lang and Lundholm, 1993; Meek, Roberts and Gray, 1995; Zarzeski, 1996; Ashbaugh, 2001). The literature also highlights that the omission of size might affect net income and book value coefficients, because of its correlation with the unrecognized net assets (Barth, Beaver and Landsman, 1998, p. 27).

Following previous literature (Van Tendeloo and Vanstraelen, 2005), we include a new variable equal to the natural logarithm of assets (LnA) in equation 2 as a good proxy for size.

Table 11 – Relative Value Relevance:
Entire sample with P* as a dependent variable

Regression model (1)	$P^*_{it} = \gamma_0 + \gamma_1 EPS_{it} + \gamma_2 BVPS_{it} + \varepsilon_{it}$	
	Italian	IASB
Intercept	-4.327*** (-3.76)	-4.329*** (-3.68)
EPS	-0.021 (-0.42)	-0.020 (-0.43)
BVPS	0.959*** (3.43)	0.939*** (3.34)
Adjusted R ²	0.4565	0.4498
Cramer test	0.094	
Chow test	0.011	

T statistics are presented in parenthesis; *, ** and *** indicate statistical significance at the 10%, 5% and 1% level

Table 12 – Incremental Value Relevance:
Entire sample with P* as a dependent variable

Regression model (2)	$P^*_{it} = \delta_0 + \delta_1 EPS_{it} ITA + \delta_2 BVPS_{it} ITA + \delta_3 \Delta EPS_{it} + \delta_4 \Delta BVPS_{it} + \varepsilon_{it}$	
	Intercept	-4.342*** (-3.64)
EPSITA	-0.109 (-0.48)	
BVPSITA	0.954*** (3.45)	
Δ EPS	1.329 (0.41)	
Δ BVPS	-0.188 (-0.25)	
Adjusted R ²	0.4491	

T statistics are presented in parenthesis; *, ** and *** indicate statistical significance at the 10%, 5% and 1% level

After the inclusion of LnA, equation 2 becomes the following:

$$P_{it} = \delta_0 + \delta_1 \text{EPS}_{it} \text{ITA} + \delta_2 \text{BVPS}_{it} \text{ITA} + \delta_3 \Delta \text{EPS}_{it} + \delta_4 \Delta \text{BVPS}_{it} + \delta_5 \text{LnA}_{it} + \varepsilon_{it} \quad (2a)$$

Results shown in Table 13 confirm that, also with the inclusion of the controlling variable just described, the earnings and book value reconciliations still remain not statistically significant and therefore not value relevant.

Table 13 – Incremental Value Relevance:
Entire sample with the size-controlling variable

<i>Regression model (2)</i>	$P_{it} = \delta_0 + \delta_1 \text{EPS}_{it} \text{ITA} + \delta_2 \text{BVPS}_{it} \text{ITA} + \delta_3 \Delta \text{EPS}_{it} + \delta_4 \Delta \text{BVPS}_{it} + \delta_5 \text{LnA}_{it} + \varepsilon_{it}$
Intercept	11.184*** (2.48)
EPSITA	0.070 (0.22)
BVPSITA	0.936*** (3.83)
Δ EPS	-1.231 (-0.27)
Δ BVPS	0.676 (0.57)
LnA	-0.485 (-1.52)
Adjusted R ²	0.4050

T statistics are presented in parenthesis; *, ** and *** indicate statistical significance at the 10%, 5% and 1% level

6 – Conclusions, implications and limits

The purpose of this paper is to investigate if, in countries where the accounting practice is conservative and developed in a context with a weak equity market, and where a high level of debts and taxes dominate accounting rules, the shift toward the IASB accounting model has produced an increase in the explanatory power of accounting amounts.

Confirming our expectations and previous research in weak equity countries (Callao, Jarne and Lainez, 2007; Hung and Subramanyam, 2007), the adoption of IASB standards did not bring a real improvement of the value relevance of accounting amounts.

Our findings contribute to the debate on the improvement of value relevance resulting from the transition to IASB standards.

They indicate that the adoption of high-quality, shareholder-oriented standards is not itself sufficient

to improve the value relevance of accounting amounts; other institutional factors affect the usefulness of accounting data and of the information such data give to investors.

Our research results could also be of interest to policy makers and national standard setters.

Policy makers of countries with weak equity markets and a high incidence of debts, who are evaluating the possibility of introducing IASB standards, should not make such a choice if their purpose is to improve the value relevance of accounting amounts.

Other reasons, first and foremost the hope to harmonize their own accounting rules with the rest of the world, might induce policy makers to adopt IASB standards. However, value relevance should not be the main reason.

The adoption of rules similar to IASB standards for unlisted entities is an important issue for local standard setters, especially in European countries where, as a consequence of EU Regulation 1606/2002, two different sets of accounting rules, domestic and IASB rules, coexist.

This paper highlights that the supposed superiority of the IASB accounting model is not found when examining empirical results in countries whose institutional factors are deeply different from those present in Anglo-Saxon countries.

Bearing in mind that in Europe domestic GAAP are applied to unlisted firms, and accounting practice mainly aims at creditor protection, and tax and government control, we have serious doubts about the real utility of adopting IASB standards or adapting domestic practice to these new rules.

In reference to the limits of our research, we have to admit, as previous authors have noticed, that it is difficult to distinguish between relevance and reliability. To be relevant, an accounting amount must be sufficiently reliable for investors (Barth, 2000, p. 17). In order to overcome such a limit, we included audit quality in our analysis – both for relative and incremental value relevance.

However, the financial scandals that have involved audit firms might have dramatically decreased auditors' reliability and, as a consequence, the trustworthiness of the financial statements they have audited.

As a consequence, the very similar value relevance we found might be partially generated by the poor reliability of financial statements regardless of the standards applied.

The high similarity we found in the explanatory power of the two accounting systems under analysis might also be ascribed to the fact that entities interested in the application of EU Regulation 1606/2002 might have gradually changed their accounting amounts (Lang, Raedy and Yetman, 2003) before 2005. If they did, it is evident that the differences gradually disappeared, and one year before the man-

datory change (2004) – that is the year analyzed – entities that issued their financial statements using Italian accounting standards had already modified their criteria to be compliant, whenever possible, with IASB standards.

However, when reading the financial statements issued by Italian entities between 2002 and 2004, we did not find significant changes in the principles applied to value items included in balance sheets or income statements¹¹. Moreover, the first step of our analysis confirms that changes made in 2004 were significant, even if not value relevant.

Finally, our analysis is limited to one year that refers to a particular situation, when the economic climate started to improve. We cannot be sure that all the results we found would have been the same if we had analyzed a year in a different economic condition.

This limit, however, is implicit and cannot be avoided when using the First-Time Adoption which gives researchers the opportunity to compare different financial statements that refer to the same year but are issued with two different sets of accounting standards.

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¹¹ On the basis of a previous study (Mechelli, 2009) discussing the low level of compliance with IASB standards by Italian entities, we can assert that numerous Italian listed companies have delayed the introduction of IASB standards rather than brought it forward.

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