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**Capital Market Effects of the IFRS Adoption for Separate Financial Statements:
Evidence from the Italian Stock Market**

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ABSTRACT

Using a sample of Italian firms, this paper investigates whether separate financial statements are useful to capital market investors and whether IFRS are more value-relevant than domestic GAAP.

This paper finds that separate financial statements are value-relevant regardless of the accounting standard set. However, while results are robust for book value, they provide mixed evidence on net income.

Contrary to expectations, this paper also finds that separate financial statements under IFRS do not provide incremental information content beyond that provided under domestic GAAP. Actually, there is some evidence that domestic GAAP are more value-relevant than IFRS.

Finally, this paper documents the important role of model specification in value-relevance studies.

KEYWORDS: Value-Relevance, Domestic GAAP, IFRS, Separate Financial Statements, Regulation 1606/2002, non-linear regression

JEL CLASSIFICATION: M41, G10

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1. Introduction

Since 2005 all listed companies in the European Union have been required to prepare their financial statements in accordance with International Financial Reporting Standards (IFRS)[1]. IFRS were introduced in the European Union by Regulation 1606/2002, which mandates IFRS for listed consolidated financial statements, with a member state option to apply IFRS to other reporting entities. A certain number of states have used this option and have extended IFRS to separate financial statements. Table 1 shows the states in the European Union (EU) and the European Economic Area (EEA) requiring or permitting IFRS for separate financial statements.

(Insert Table 1 about here)

IFRS adoption for separate financial statements has been widely questioned, especially in those countries where taxation rules are closely aligned to domestic GAAP[2] (Choi and Mueller 1992, Lamb *et al.* 1998, Nobes 1998, Nobes 2003, Delvaille *et al.* 2005, Whittington 2005, Oliveras and Puig 2007, Macias and Muiño 2011). Many have also argued that IFRS are intended for consolidated accounts and for the needs of capital market investors, which raises practical concerns about the relevance of IFRS for separate financial statements (EFRAG 2011)[3]. For these reasons, EFRAG has recently launched a proactive project, *"Separate Financial Statements prepared under IFRS"*, whose purpose is to determine whether IFRS are fit-for-purpose in satisfying the information needs of separate financial statement users.

Academic research is an important tool for standard setters and policy-makers as it can inform the debate and the decision-making process on financial reporting issues. The purpose of this research is therefore to investigate whether separate financial

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[1]IAS were issued by the International Accounting Standard Committee (IASC), predecessor of the International Accounting Standard Board (IASB) until 2000. IFRS are issued by the IASB. For ease of exposition, the term IFRS is used to refer to both the International Accounting standards (IAS) and to the International Financial Reporting Standards (IFRS).

[2] GAAP is the acronym for Generally Accepted Accounting Principles.

[3] EFRAG stands for European Financial Reporting Advisory Group.

statements are useful for capital market investors and whether IFRS are more value-relevant than domestic GAAP. These are key issues both for EFRAG's proactive project and for those policy makers who might be interested in evaluating the adoption of IFRS for separate financial statements.

The empirical analysis focuses on the Italian context, where the mandatory extension of IFRS to separate financial statements for certain types of firms, such as listed companies, has been widely questioned. One reason for such a dispute is that, due to the enhanced dependency principle of tax base on net income statements, tax computation for listed companies partially differs from unlisted companies, thereby introducing disparities among firms. Moreover, it has been argued that the dependency principle applied to accounts prepared under IFRS raises too many interpretative doubts, therefore allowing for higher discretion of tax inspectors (Mastellone 2011, Gavana 2013)[4]. Despite its Italian context, this research however provides guidance of international nature relating to the potential effects of adopting IFRS for separate financial statements in other European countries[5].

Overall, findings document that separate financial statements provide investors with useful information. Separate financial statements are value-relevant under both Italian GAAP and IFRS, although results are robust for book value, whereas they provide mixed results for net income. Contrary to expectations, findings also indicate that adopting IFRS does not increase the value-relevance of separate financial statements,

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[4] After the full acceptance of IFRS for unconsolidated financial statements, the Italian legislator now seems to be moving towards a more conservative approach. In fact, the Legislative Decree 225/2010, converted into Law n. 10/2011, states that the new IFRS adopted by the European Union after January 2011 need to be endorsed by the Italian Ministry of Justice before they can be applied to unconsolidated financial statements for Italian listed companies.

[5] Domestic GAAP in the European Union are all based on the fourth and seventh European Directives, whose objective is to guarantee financial disclosure harmonization at a European Union level for firms not adopting IFRS. The Directives provide a single framework for accounting and a set of minimum requirements that member states have to implement in order to ensure that the prevailing accounting rules are compatible with those of other member states.

thus providing some support to those who call for a return to domestic GAAP for separate financial statements.

In terms of contribution, this paper expands on prior literature in different ways. First of all, this paper is the first to investigate the value-relevance of separate financial statements and the effects of adopting IFRS[6]. It provides useful insights into the information needs of financial statement users by investigating the incremental information content of separate over consolidated financial statements. Moreover, this paper documents the effects of adopting IFRS for separate financial statements in terms of changes in the value-relevance of accounting numbers. Its findings are therefore of interest to those countries either requiring, permitting or considering the adoption of IFRS for separate financial statements. Furthermore, this paper contributes to previous literature from a methodological perspective. Following Clarkson *et al.* (2011), it controls for possible model misspecification by introducing into the valuation model a cross-product term, equal to the product of book value and net income, which is intended to reflect possible nonlinearities in the relationship between share prices and accounting variables. The adoption of such a model finds support in prior literature (Riffe and Thompson 1998, Beatty et al. 2002, Ohlson 2009) and, as will be seen, alters inference based on a traditional linear model.

The remainder of the paper is organized as follows. Section 2 presents the relevant literature on the topic, while Section 3 provides the research design. Section 4 describes data and provides descriptive statistics. Section 5 presents empirical results from a

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[6] The only study related to IFRS adoption for separate financial statements is the one by Macias and Muiño (2011), although their analysis is based on consolidated data. Macias and Muiño show that European countries requiring the use of domestic standards in separate financial statements exhibit in general a significantly lower value-relevance of accounting data, which is interpreted as evidence that that domestic standards are more oriented towards the satisfaction of different needs than those of investors. Accounting quality is measured by the authors by using the explanatory power of earnings and equity book value for stock prices and the ability of earnings to explain future cash flows. Differently from their research, this paper investigates directly the relation between share prices and numbers in separate financial statements.

linear model, while Section 6 provides some additional analysis and robustness check. Section 7 contains the conclusion.

2. Literary review

Evidence regarding the value-relevance of separate financial statements is rather limited - both in absolute terms and in comparison to consolidated data - largely due to US companies not disclosing parent accounts. Darrough and Harris (1991) examine the effects of consolidation in Japan and find little evidence of incremental information content of consolidated data. They conclude, however, that these results cannot be generalized due to the unique institutional environment and inter-firm ownership relations. Likewise, Harris *et al.* (1997) provide weak evidence that consolidation increases the value-relevance of accounting numbers for a sample of German firms. However, findings are not consistent across the sample years and the flexibility afforded in the application of domestic GAAP to consolidated accounts is claimed to influence the results. Alford *et al.* (1993) find, instead, that both unconsolidated and consolidated earnings are value-relevant for a set of non-US companies, with consolidated data being more value-relevant. These results are in line with Abad *et al.* (2000), who show that consolidated information dominates parent company information for a set of listed companies in Spain.

Many have argued that separate financial statements mainly satisfy regulatory and taxation purposes (Choi and Mueller 1992, Lamb *et al.* 1998, Nobes 1998, Nobes 2003, Delvaille *et al*. 2005, Whittington 2005, Norberg 2007, Oliveras and Puig 2007, Macias and Muiño 2011), which provides a potential explanation for evidence documenting their lower value-relevance. Indeed, unconsolidated accounts are the starting point for tax computation, although the degree of connection between taxation and financial reporting varies across countries and time according to the differing purposes assigned

to financial reporting by policy-makers (Haller 1992, Pfaff and Shröer 1996, Nobes 2003, Norberg 2007).

Instead, IFRS are strongly oriented to the needs of investors, who are considered to have the most critical and immediate need for the information in financial reports (IASB 2010 BC 1.16). For this reason, empirical research has long investigated the effects of adopting IFRS on capital markets, with a focus however on consolidated data. In particular, the mandatory adoption of IFRS in the European Union has represented an extraordinary opportunity for empirical studies.

A certain number of studies have focused on the effects of making IFRS mandatory in different countries contemporarily. Aubert and Grudnitski (2011), for instance, examine 13 countries in the European Union and 20 industries at the same time, but fail to document a statistically significant increase in the value-relevance of accounting information after the adoption of IFRS. Daske *et al.* (2008) examine the mandatory adoption of IFRS not only in Europe, but worldwide, and find statistically significant, but economically modest capital market benefits around IFRS adoption. Such market benefits occurred, however, only in countries where firms had incentives to be transparent and where legal enforcement was strong. Byard *et al*. (2011), Barth *et al*. (2012) and Horton *et al*. (2012) also document the important role of enforcement regimes and firm-level reporting incentives in determining the impact of the mandatory adoption of IFRS.

Other studies have investigated the mandatory adoption of IFRS in individual countries, with the important advantage of reducing the problem of omitting variables. Callao *et al.* (2007), for instance, focus on the adoption of IFRS in Spain and find that the value-relevance of financial reporting does not improve, whereas comparability even worsens for firms adopting IFRS. Horton and Serafeim (2010) examine the UK

stock market documenting a decrease in forecast errors for firms mandatorily adopting IFRS. Christensen *et al.* (2007) investigate a similar setting, but focus on the effect of adopting IFRS on debt contracting, documenting significant market reactions to IFRS reconciliation announcements. Gjerde *et al.* (2008) focus on IFRS restatements for firms listed on the Oslo Stock Exchange and find mixed results according to the research methodology employed, whereas Iatridis and Rouvolis (2010) examine the Greek context documenting a higher value-relevance for IFRS-based financial statements.

Some researchers have pointed out that these mixed results could be due to the different levels of legal enforcement and firm incentives in adopting IFRS (e.g. Atanassova 2008, Daske *et al.* 2008, Beuselinck *et al.* 2010, Aharoni *et al.* 2010, Kvaal and Nobes 2010, Verriest *et al.* 2010, Byard *et al.* 2011, Barth *et al.* 2012 and Horton *et al.* 2012), whereas others have suggested that mixed results could be driven by methodological issues, such as the misspecification of the regression models (Soderstrom 2007). In fact, prior research documents that conservatism induces a downward bias in book value and earnings (e.g. Basu 1997, Beatty, Riffe and Thompson 1999). Ohlson (2009) also shows that fair value accounting measures expected earnings with considerable measurement errors. Along the same line, Clarkson *et al.* (2011) report increased nonlinearity in the relation between share prices and accounting data subsequent to the adoption of IFRS. Taken as all, this evidence suggests that nonlinear models should be adopted in value-relevance studies.

3. Research hypotheses and methodology

This study belongs to the area of value-relevance research, which is consistent with the IASB's focus on the information needs of capital market investors. In the extant literature, an accounting amount is defined as value-relevant if it is significantly associated with share prices (Barth *et al.* 2001). Value-relevance is an empirical way for

operationalizing the criteria of relevance and reliability, which are used by standard setters in order to choose among accounting alternatives.

Following the review in Section 2, this paper tests three hypotheses, specified as alternatives to their nulls. The first purpose of this paper is to check whether information included in separate financial statements is value-relevant, regardless of the accounting standard set used for their preparation. As a result, the first research hypothesis can be stated as follows:

H1: Separate financial statements are value-relevant to capital market investors. As a consequence, the estimated coefficients on book value and net income are expected to be significantly different from zero.

This research focuses on the book value of equity and net income as they are key drivers in firm valuation (Feltham and Ohlson 1995, 1996; Ohlson 1999, 2000). Following Ohlson (1995), the basic model for testing the first hypothesis is[7]:

$$PPS_{it-30,t+60} = \alpha_0 + \alpha_1 BVPS_{it_{SEP}} + \alpha_2 NIPS_{it_{SEP}} + \alpha_3 BVPS_{it_{CON}} + \alpha_4 NIPS_{it_{CON}} + \varepsilon \quad (1)$$

where :

$PPS_{it-30,t+60}$ = price per share for firm i over a period which includes 30 days before the first IFRS separate financial statements, issued at time t, and 60 days after;
$BVPS_{it_{SEP}}$ = book value of equity per share for firm i in the first IFRS separate financial statements, issued at time t;
$NIPS_{it_{SEP}}$ = net income per share for firm i in the first IFRS separate financial statements, issued at time t;
$BVPS_{it_{CON}}$ = consolidated book value of equity per share for firm i at time t;
$NIPS_{it_{CON}}$ = consolidated net income per share for firm i at time t.

In order to test the first hypothesis, I run this model separately for Italian GAAP and IFRS numbers. Given that financial statements report both separate and consolidated

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[7] When research is oriented to determine what is reflected in the firm value over a specific period of time, research design usually consists in examining the association between market value of equity, or share price, and accounting data (Barth *et al.* 2001). Since my primary research interest is to assess whether and to what extent accounting numbers are reflected in stock prices, rather than their timeliness, I follow this approach. This approach has certain advantages over traditional return models (Collins *et al.* 1997, Rees 1997, Garrod and Rees 1998, Barth *et al.* 2001).

data, model (1) also includes consolidated book value and net income in order to control for the effects of reporting consolidated numbers on share prices. All the variables are deflated by the number of shares outstanding (Barth and Kallapur 1996, Brown, Lo and Lys 1999, Easton and Sommers 2003, Barth and Clinch 2009).

Price per share is computed as a simple average of price per shares from 30 days before the first IFRS separate financial statements to 60 days after. During this period, investors are expected to encompass the new information released in prices[8]. The time period allowed for price reaction to new information also includes 30 days prior to its disclosure as some information can be anticipated on the market (Rees and Elgers 1997). Data on individual stock prices are obtained from the Sole24Ore database, which contains daily information on stock prices from the Italian Stock Exchange. Accounting data under domestic GAAP and IFRS, as well as reconciliation data and consolidated numbers, are hand-collected from the financial statements of the sample firms.

If book value and net income in separate financial statements are not value-relevant, this suggests that such numbers do not serve the needs of investors. If separate financial statements are instead value-relevant, the following step will be to investigate which accounting standard set – either Italian GAAP or IFRS - is more linked to share prices.

One of the purposes of the European Regulation 1606/2002 adopting IFRS in Europe is to ensure a higher level of transparency in financial statements, which is necessary to build an efficient and integrated capital market. As a result, IFRS are expected to be more value-relevant than Italian GAAP. The second research hypothesis can therefore be specified as follows:

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[8] As outlined by Bartov *et al.*, the choice about the length of the event window always involves a trade-off. On the one hand, windows that are too wide might increase the noise-to-signal ratio, thereby decreasing the explanatory power of accounting numbers. On the other hand, however, windows that are too narrow might exclude part of market reaction to the event of interest.

H2: The value-relevance of IFRS for separate financial statements is significantly higher than Italian GAAP, as evaluated by a higher adjusted R^2 in the regression of price on book value and net income per share.

Table 2 reports the main differences between Italian GAAP and IFRS.

(Insert Table 2 about here)

To test the second research hypothesis, I can exploit the advantage that, in the first year of IFRS adoption, firms are required to prepare their financial statements according to both domestic standards and IFRS as well as to provide investors with reconciliations to IFRS. This allows for the comparison of accounting numbers prepared under both domestic standards and IFRS for the same set of firms at the same date. As the economic reality is the same, this approach ensures that the differences observed between financial measures are exclusively due to differences in accounting standards. In fact, firm-related, country-related and other factors which might affect accounting value-relevance remain constant. Moreover, as IFRS adoption for separate financial statements is mandatory in Italy, this approach overcomes the problem of controlling for changes in firms' incentives to change financial reporting standards. Finally, at the date of IFRS adoption for separate financial statements, consolidated financial statements had already been prepared under IFRS. Consolidated financial statements switched to IFRS in 2005, separate financial statements in 2006. As a result, this time discrepancy allows me to disentangle the effects of the first time adoption of IFRS on separate statements from those on consolidated financial statements.

In order to test the second research hypothesis, I perform regression (1) using either Italian GAAP or IFRS numbers reported in the first separate financial statements issued according to IFRS. As in prior studies (e.g. Hung and Subramanyam 2007, Gjerde *et al.* 2008), value-relevance is measured using the explanatory power of accounting

measures for share prices, i.e. the accounting numbers with higher R^2 are considered to be more value-relevant. Following prior research (e. g. Vincent 1999, Dhaliwal 1999, Khurana and Kim 2003, Chen and Zhang, Oswald 2008, Hung and Subramanyan 2008, Gjerde *et al.* 2008), the statistical significance of the differences in R^2 is tested using a test based on Vuong (1989)[9].

If findings show that IFRS are less value-relevant than Italian GAAP, it would be difficult to reject the claim of those who question IFRS adoption for separate financial statements. In fact, if IFRS are primarily conceived for capital market investors, yet capital market investors do not consider them to be more useful than Italian GAAP, why should they then be adopted?

This paper also follows a supplementary approach based on an incremental test, which examines *per se* the value relevance of the adjustments introduced by IFRS to book value and net income (Amir *et al.* 1993, Hung and Subramanyam 2007, Gjerde *et al.* 2008)[10]. I take Italian GAAP as a base and I then look at the marginal value-relevance of having access to IFRS. As a result, the third research hypothesis is as follows:

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[9] In this paper the universe of available observations of Italian, non-financial institutions adopting IFRS are studied, therefore all differences are significant in principle, and no tests are needed. However, tests for differences in R^2 are performed in order to draw more general conclusions.
The Vuong (1989) test is a likelihood-ratio test of non-nested difference in explanatory power between two models, under the null hypothesis that either model is ''true.''

[10] Value-relevance tests can be classified in relative association and incremental association tests. Relative association tests compare the association between stock market values (or changes in values) and alternative accounting measures. This kind of test focuses on differences in the R^2 of regressions. The accounting numbers with the highest R^2 are described as being more value-relevant. Incremental association tests, rather, investigate whether the accounting number is helpful in explaining stock market values (or returns) given other specified variables. That accounting number is deemed to be value-relevant if its estimated regression coefficient is significantly different from zero.
Biddle *et al.* (1995) show that relative value relevance and incremental value relevance are conceptually distinct. It is possible that two measures are incrementally value-relevant with respect to each other even though there are no differences in relative value relevance. Therefore, my incremental value relevance tests provide additional evidence that cannot be inferred from the relative value relevance analysis.

H3: IFRS reconciliations to book value and net income in the separate financial statements are incrementally value-relevant, as evaluated by their regression coefficients with share prices, which are expected to be significantly different from zero.

In order to test the third research hypothesis, I subdivide book value and net income under IFRS as follows:

$$PPS_{it-30,t+60} = \beta_0 + \beta_1 BVPS_{it\ SEP}^{IGAAP} + \beta_2 BVPS_{it\ SEP}^{IFRS-IGAAP} + \beta_3 NIPS_{it\ SEP}^{IGAAP} + \beta_4 NIPS_{it\ SEP}^{IFRS-IGAAP}$$

$$+ \beta_5 BVPS_{it\ CON} + \beta_6 NIPS_{it\ CON} + \varepsilon \quad (2)$$

where :

$PPS_{it-30,t+60}$ = price per share for firm i over a period which includes 30 days before the first IFRS financial statements, issued at time t, and 60 days after;

$BVPS_{it}^{IGAAP}$ = book value of equity per share for firm i under Italian GAAP in the first IFRS separate financial statements, issued at time t;

$BVPS_{it}^{IFRS-IGAAP}$ = book value reconciliation per share for firm i from Italian GAAP to IFRS in the first IFRS separate financial statements, issued at time t;

$NIPS_{it}^{IGAAP}$ = net income per share for firm i under Italian GAAP in the first IFRS separate financial statements, issued at time t;

$NIPS_{it}^{IFRS-IGAAP}$ = net income reconciliation per share for firm i from Italian GAAP to IFRS in the first IFRS separate financial statements, issued at time t;

$BVPS_{it\ CON}$ = consolidated book value of equity per share for firm i at time t;

$NIPS_{it\ CON}$ = consolidated net income per share for firm i at time t.

If the coefficients on reconciliation items are statistically significant, then IFRS provide incremental information content to investors beyond domestic GAAP.

4. Data and descriptive statistics

This research focuses on the separate financial statements of parent companies, i.e. companies with one or more subsidiaries. The sample is made of industrial firms listed on the Italian stock exchange at the date of the mandatory adoption of IFRS for separate financial statements. In order to identify the sample firms, the Sole24Ore database is used. The number of firms included in this database at the date of IFRS adoption was 264. Following other studies (e.g. Hung and Subramanyan 2007), I drop banks as well

as insurance and financial investment companies as their activities are very different from manufacturing and industrial services. This choice allows me not to introduce dummy variables for the industries into the regressions, consistently with a principle of parsimony in selecting the regression model (Schwarz 1978, Jefferys and Berger 1992, Forster and Sober 1994). I also drop firms for which one or more data are not available and I exclude firms only preparing individual financial statements, which are the only information source available to capital market investors. Moreover, I exclude firms in temporary receivership, for which insistent rumours about possible mergers, acquisitions as well as other news and managers' interviews could influence prices more than the release of financial statements. Finally, I drop firms that went public in the first year of IFRS adoption as they prepared financial statements directly according to IFRS. In the end, the sample results in 173 firms. Table 3 reports the distribution of the sample firms by industry group.

(Insert Table 3 about here)

Table 4 documents changes precipitated by the adoption of IFRS on book value, net income and their adjustments in separate financial statements for the sample firms before the winsorization of extreme observations in order to run regressions, while Table 5 displays descriptive statistics on some important key financial ratios. All numbers are in Euros.

(Insert Table 4 about here)

At the date of IFRS adoption, book value captures the cumulative effect of accounting differences, whereas net income captures the effects of accounting differences during the fiscal year. Table 4 shows that, at the time of the first adoption, 99% of the firms have positive book values in separate financial statements under both Italian GAAP and IFRS. Only one firm reports a negative book value (-24,119,771)

under Italian GAAP, which remains negative (-26,811,279) under IFRS. Firms reporting book value adjustments are 99%. Only one firm does not report any adjustment either on the balance sheet or on the income statement. Book value adjustments are positive in 49% of cases and negative in 51%, but none of the book values change signs after the adoption of IFRS. Adjustments of the book value are included between – 69% and +112% of the amount under Italian GAAP. After the adoption of IFRS, the average book value in separate financial statements rises by 3.13% as a result of large adjustments made by a few firms, while the median slightly decreases by 0.51%. The standard deviation under IFRS is slightly higher (+4.09%) than under Italian GAAP, indicating that the adoption of IFRS magnified differences across firm book values.

Net income captures the effect of accounting differences during the fiscal year. Firms reporting net income adjustments in separate financial statements represent 99% of the sample; positive adjustments are at 45% and negative ones are at 55%. Five firms have changed their net income from negative to positive and five from positive to negative. Net income adjustments are included between -1,054% and +2,567% of net income under Italian GAAP. Overall, after IFRS adoption, net income decreased by 8.62% on average and by 1.34% in median. Standard deviation also decreases by 3.37%, indicating that IFRS adoption has reduced net income cross-sectional variation.

(Insert Tables 5 about here)

Table 6 reports descriptive statistics for the variables included in the regressions. In order to limit the effect of possible outliers in the inferential analysis, one could adopt different rules. In this paper, extreme observations of each variable are winsorized: all data below the 5th percentile are set to the 5th percentile, and data above the 95th percentile are set to the 95th percentile. This allows me not to drop observations from a

sample that is already small. However, I also replicate the analysis by eliminating observations with studentized residuals above two (Belsley *et al.* 1980), but results (not reported) are qualitatively similar.

(Insert Table 6 about here)

Table 7 shows Pearson's correlation coefficients for the variable included in the regressions.

(Insert Table 7 about here)

According to the univariate analysis, there is a significant correlation at the 5% level between share price and book value and net income in separate financial statements under both IFRS and Italian GAAP. Moreover, correlations with book value and net income are slightly higher under Italian GAAP, thus suggesting that Italian GAAP are more informative than IFRS. When examining reconciliation items, the correlation coefficient between share price and book value reconciliation to IFRS is not significant, whereas the correlation coefficient between price and net income reconciliation is significant at the 5% level. There is also a significant correlation between consolidated book value and net income and share price at the 5% level. As expected, the correlation between consolidated and separate book value and net income is also very high, although it is surprisingly higher for separate financial statements under Italian GAAP than under IFRS. Given that consolidated accounts are prepared according to IFRS, a higher correlation with separate financial statements prepared according to IFRS was in fact to be expected. Finally, the correlation coefficients between share price and all the product terms are positive and significant at the 5% level, thus suggesting possible nonlinearities in the relationship between prices and accounting variables.

5. Findings from the linear model

In this section, I discuss findings from the linear model. Tables 8 shows results from regression (1), while Table 9 reports results from regression (2). In order to evaluate the two accounting standard set unconditionally, regression (1) is performed separately for Italian GAAP and IFRS numbers. I also estimate a consolidated data only version of regression (1), which allows me to test the effects of adding separate financial statement numbers on the value relevance of accounting numbers.

(Insert Table 8 about here)

In the regression with consolidated data only, all the coefficients are statistically significant at the 1% level and the R^2 is 66.9%. Results therefore indicate that consolidated data provide value-relevant information to investors and explain the majority of the variation in share prices. When separate financial statement data are included in the model, the R^2 increases to 70.1% for Italian GAAP and to 69.2% for IFRS, which suggests an incremental contribution, although modest, of separate financial statements in explaining share price variation. Differences in R^2 between regressions with consolidated data only and the full model are statistically significant at the 1% level for both the accounting standard sets[11]. Taken as a whole, evidence suggests that information conveyed by both separate and consolidated financial statements is value-relevant, i.e. useful, to capital market investors. This result holds regardless of the accounting standard set used to prepare separate financial statements, and provide support for the first research hypothesis that separate financial statements contain additional value-relevant information beyond consolidated data.

Book value and net income coefficients for separate financial statements are positive and significant at the 1% and 5% level, respectively, under both Italian GAAP and

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[11] Differences in R^2 between the regression with consolidated data only and the full model are tested with the F-test for nested models.

IFRS. Furthermore, the coefficients on book value and net income for separate financial statements are higher under Italian GAAP than under IFRS, consistent with Italian GAAP being more conservative than IFRS. When comparing the explanatory power of the regressions, findings document a lower value-relevance of accounting data under IFRS than under Italian GAAP, which suggests that accounting disclosure based on Italian GAAP is more informative than IFRS. The Vuong statistics (Vuong 1989) indicates that the difference in the explanatory power of the regressions is significant at the 10% level.

Table 9 reports results from the incremental value-relevance test for IFRS.

(Insert Table 9 about here)

The adjusted R^2 of the regression is 69.8% and the estimated coefficients on book value and net income of separate financial statements under Italian GAAP are positive and statistically significant. Instead, both the estimated coefficients on book value and net income adjustments are not significant at the conventional level[12], which suggests that investors having access to the Italian GAAP financial statements do not find valuable additional information in the book value and net income adjustments to IFRS. Findings from regression (2) therefore fail to provide empirical support to the third research hypothesis that IFRS provide incremental value-relevant information beyond domestic GAAP.

6. Additional analysis and robustness tests

In this section, I test the sensitivity of results from the linear model to other model specifications. First of all, following Clarkson *et al.* (2011) I extend the linear pricing

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[12] A potential criticism is that there is high correlation between some of the variables included in the regression. As is well know, multicollinearity reduces the statistical significance of the coefficients, therefore it will be harder to reject the null hypothesis that the independent variable has no effects on the dependent variable. However, results (not reported) from regression without consolidated book value, which is the only variable with variance inflation factor higher than 5, are qualitative similar. Actually, there is no specific level of VIF that higlights the presence of multicollinearity problems. For instance, Besley, Kuh and Welsch (1980), Greene (2008) point out that a level over 20 is indicative of a problem. In this paper, I adopt a conservative approach, which considers a variance inflation factor of five as a limit (Marquardt 1970).

model by introducing a product term between book value and net income in order to reflect possible nonlinearities in the relationship between prices and accounting data. I therefore perform the following nonlinear pricing models (termed the "product models"):

$$PPS_{it\text{-}30,t+60} = \delta_0 + \delta_1\, BVPS_{it\,SEP} + \delta_2\, NIPS_{it\,SEP} + \delta_3\, BVPS_{it\,CON} + \delta_4\, NIPS_{it\,CON}$$

$$+ \delta_5\, BVPS_{it\,SEP} \times NIPS_{it\,SEP} + \delta_6\, BVPS_{it\,CON} \times NIPS_{it\,CON} + \varepsilon \quad (4)$$

and

$$PPS_{it\text{-}30,t+60} = \eta_0 + \eta_1\, BVPS_{it}^{IGAAP} + \eta_2\, BVPS_{it}^{IFRS\text{-}IGAAP} + \eta_3\, NIPS_{it}^{IGAAP} + \eta_4\, NIPS_{it}^{IFRS\text{-}IGAAP}$$

$$+ \eta_5\, NIPS_{it}^{IGAAP}\, x\, BVPS_{it}^{IGAAP} + \eta_6\, NIPS_{it}^{IFRS\text{-}IGAAP}\, x\, BVPS_{it}^{IFRS\text{-}IGAAP} + {} + \eta_7\, BVPS_{it\,CON}$$

$$+ \eta_8\, NIPS_{it\,CON} + \eta_9\, BVPS_{it\,CON} \times NIPS_{it\,CON} + \varepsilon \quad (5)$$

All the variables are defined as in regressions (1) and (2) and results are provided in Tables 10 and 11, respectively. Regression (4) is performed separately with domestic GAAP and IFRS numbers.

(Insert Table 10 about here)

Overall, regression (4) provides support to the hypothesis that separate financial statements are value-relevant. However, after controlling for nonlinearities, the coefficient on net income is not significant under both the accounting standard sets, whereas the coefficient on book value is still strongly significant, suggesting that only balance sheets in separate financial statements are value-relevant to investors. As for the linear model, financial statements under Italian GAAP are more value-relevant than under IFRS. However, differences in R^2 are not significant at conventional levels. Finally, the product term is negative and statistically significant for consolidated data under both the accounting regimes, consistent with Clarkson *et al.*, suggesting measurement errors which increase with the value of the group of companies. If one

consider measurement errors as one dimension of financial reporting quality, one could interpret these results as evidence that investors do not consider consolidated accounts prepared according to IFRS to be reliable enough and for this reason they make downward adjustments when pricing the parent company. This is not the case of separate financial statements, as the product term is not statistically significant under both the accounting standard sets.

Along the same lines, Table 11 shows that the reconciliation amounts to IFRS are not statistically significant.

(Insert Table 11 about here)

As in regression (4), after controlling for nonlinearities, net income in separate financial statements is not significant, whereas book value is still strongly significant. For separate financial statements, the product term of book value and net income under Italian GAAP is not significant, whereas the product term of the reconciliation items is significant at the 5% level, thus suggesting the absence of measurement errors under Italian GAAP, which show up when applying IFRS.

Taken as a whole, the robustness check performed in this section increases confidence in the conclusion that separate financial statements convey value-relevant information to investors and that reporting under IFRS does not have incremental information content beyond domestic GAAP.

Moreover, performing the product model allows some inferences to be made on consolidated data, which would not have been possible had the analysis been confined to the traditional linear model.

Finally, I perform a pooled regression of price on the book value and net income per share. This includes an accounting standard dummy variable and its product with book value and net income in order to check the differential effect of reporting under IFRS

over Italian GAAP (Bartov *et al.* 2005, Horton and Serafeim 2010). Results (not reported) are qualitatively similar to previous findings, as both the dummy variable and the interaction terms are not statistically significant, thus indicating that reporting under IFRS does not provide incremental value-relevance to accounting numbers.

7. Conclusions

This paper investigates the value-relevance of separate financial statements and the implications of adopting IFRS. It focuses on the Italian context and it compares information under both Italian GAAP and IFRS for the same set of firms at the same date.

Overall, findings suggest that separate financial statements are value-relevant, i.e. they provide information useful to capital market investors. One potential explanation for these results is that share prices are driven by expected dividends, and profit distribution is governed - at least in Italy – by rules that rely on accounting numbers provided by separate financial statements. Empirical findings are however only robust for book value, whereas they provide mixed evidence on net income.

Contrary to expectations, findings also indicate that reporting under IFRS does not have incremental information content, thus suggesting that Italian GAAP provide investors with all the information they need. Actually, there is little evidence that investors prefer domestic GAAP to IFRS. For the present sample, these results might be driven by the fact that rules governing profit distribution rely on conservative criteria, which are heavily aligned to domestic GAAP. Investors could therefore consider Italian GAAP adequate for forecasting expected dividends. Furthermore, investments in subsidiaries that are not held for sale are usually a main item in separate financial statements[13]. According to Italian GAAP, such investments must be accounted for at

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[13] In the present sample, investments in subsidiaries, jointly controlled entities and associates account, on average, for 48% of the total assets under Italian GAAP and for 36% under IFRS.

their cost or with the equity method. According to IAS 27, such investments are accounted for either at cost or at fair value, but all the sample firms - except for one - report such investments at cost. This could therefore explain why IFRS numbers do not provide incremental information content beyond domestic GAAP.

Finally, this paper highlights the importance of model specification in empirical research, showing that statistical inference on the value-relevance of accounting numbers is altered by the adoption of a nonlinear valuation model. After controlling for nonlinearities, net income in separate financial statements is not significant, thereby suggesting that net income does a poor job in explaining share prices. Book value is instead strongly significant, consistent with investors emphasizing balance sheets in separate financial statements. The nonlinear model shows that adopting IFRS induces some measurement errors, an inference that would not have been possible had the analysis been confined to the traditional linear model. As fair value accounting applies widely in consolidated financial statements and makes financial information based on market-to-market models more subjective, this might provide an explanation for investors applying downward corrections when pricing the firm, consistent with the negative coefficient on the nonlinear term. On the contrary, as mentioned above, all the sample firms report investments in subsidiaries that are not held for sale at cost. Separate financial statements under both Italian GAAP and IFRS are therefore widely based on the historical criterion, which could provide an explanation for the product term not being significant for separate financial statements under both the standard sets. Taken as whole, results from the product model are consistent with Clarkson *et al.* (2011) and suggest that the adoption of the product model is justified and should be considered by researchers when doing levels valuation research.

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Table 1 – IFRS adoption for separate financial statements in the European Union and in the European Economic Area

Member States	Requiring IFRS in listed companies' separate financial statements	Requiring IFRS in other companies' separate financial statements	Permitting IFRS in separate financial statements
Austria	No	No	No
Belgium	Yes, for real estate investment companies.	No	No
Bulgaria	Yes	Yes, except for SMEs and entities in liquidation and insolvency.	Yes, for SMEs
Cyprus	Yes	Yes	No
Czech Rep.	Yes	No	No
Denmark	No	No	Yes, all types
Estonia	Yes	Yes, for credit institutions, insurance undertakings, financial holding companies, mixed financial holding companies, investment firms.	Yes, all other types
Finland	No	No	Yes, for companies which are audited by certified auditors except insurance companies.
France	No	No	No
Germany	No	No	Additionally to still required local GAAP.
Greece	Yes	Yes, for banks and other financial institutions.	Yes, for companies audited by certified auditors.
Hungary	No	No	Additionally to still required local GAAP.
Iceland	Yes	Yes. If the consolidated groups are permitted to use IFRS in their consolidated accounts.	Yes, for medium sized and big companies.
Ireland	No	No	Yes, for all bar companies not trading for gain.
Italy	Yes, except for insurance companies.	Yes, for supervised financial companies and companies with financial instruments widely distributed among the public.	Yes, all other types except for insurance and small enterprises.
Latvia	Yes	Yes, for banks, insurance commercial companies and other supervised financial institutions.	No
Liechtenstein	No	No	Yes, all types
Lithuania	Yes	Yes, for banks and other credit institutions.	Yes, except for banks and other credit institutions, insurance companies.
Luxemburg	No	No	Yes, all types
Malta	Yes	Yes, for banks, insurance companies, certain other supervised financial institutions and larger companies deemed significant in the local economy.	Yes, all other types
Netherlands	No	No	Yes, all types
Norway	No	No	Yes, all types
Poland	No	No	Yes, for companies having filed for admission to public trading or whose parent uses IFRS.
Portugal	No	No	Yes, for companies within the scope of consolidation of an entity who applies IAS/IFRS. Credit institutions and other financial institutions are excluded.
Romania	Yes, for credit institutions.	Yes, for credit institutions.	No, but for purposes of information only.
Slovakia	Yes, for companies of public interest.	Yes, for companies of public interest.	Yes, for those listed companies and merchants with securities except banks which are not those of public interest.
Slovenia	No	Yes, for banks and insurance companies.	Yes, for all other types, if so decided by the assembly of the company, but for the minimum period of 5 years.
Spain	No	No	No
Sweden	No	No	No
UK	No	No	Yes, except for the charity sector.

Source: European Commission, "Implementation of IAS Regulation 1606/2002 in the UE and EEA at 7th February 2012".

Table 2 - Summary of the main differences between Italian GAAP and IFRS at the date of IFRS adoption according to the European Regulation 1606/2002.

ITEMS	ITALIAN GAAP	IFRS
Intangible assets	Alternatively capitalized or charged to operation when incurred.	Capitalized only of if some criteria are met.
Goodwill	Amortised.	Not amortised.
Inventory	Either LIFO or FIFO or weighted average cost permitted.	LIFO not permitted. Recorded net of advances received by customers.
Property, plant and equipment.	Revaluation not permitted.	Revaluation permitted.
Provisions and contingent liabilities	Prudence prevails on competence.	Provision is made only if there is a current obligation as a consequence of an occurred event.
Finance leases	Recognised in the income statement.	Recognised on the balance sheet as tangible assets with the a financial obligation of equal value.
Tax assets and liabilities	Deferred tax assets must be posted only if it is reasonably certain that there will be sufficient taxable income to absorbe them. Deferred tax liabilities must be posted only if it is likely to be paid.	Tax assets must be recorded when it is probable that there will be sufficient taxable income to absorbe them.
Employee benefits	Recorded at nominal value and calculated as required by the Civil Code.	Determined on actuarial assumptions and discounted.
Financial instruments	Lower of cost or market values.	Fair value for certain types of investments.
Investment property	Revaluation not permitted.	Revaluation permitted
Investment in subsidiaries, jointly controlled entities and associates in separate financial statement	Recorded at cost or under equity method.	Recorded at cost or fair value.

Table 3 – Distribution of sample firms by industry (N = 173 firms)

Industry Group	%
Areospace and Defence	1%
Automobiles	4%
Chemicals	2%
Consumers (durable and non durables)	16%
Diversified Manifacturing and Capital Goods	20%
Energy	4%
Food, Beverage, Restaurants	3%
Healthcare	1%
Housebuildings, Building Materials and Constructions	8%
Media and Entertainment	9%
Natural Resources	1%
Real Estate	4%
Technology	8%
Telecommunications and Cable	3%
Transportation	4%
Utilities	13%
	100%

Table 4 – Book value, net income and reconciliation amounts at the first time adoption of IFRS for separate financial statements

	BV_{SEP}^{IGAAP}	BV_{SEP}^{IFRS}	$BV_{SEP}^{IFRS\text{-}IGAAP}$	NI_{SEP}^{IGAAP}	NI_{SEP}^{IFRS}	$NI_{SEP}^{IFRS\text{-}IGAAP}$
Mean	848,718,798	875,299,204	26,580,407	112,670,103	102,958,827	-5,840,206
First quartile	55,995,500	55,232,250	-4,704,071	437,250	535,933	-1,138,000
Median	131,941,000	131,263,000	38,000	6,609,500	6,521,000	65,470
Third quartile	458,497,467	456,311,615	5,181,306	38,550,500	40,281,500	1,471,500
Standard deviation	2,899,789,425	3,018,370,149	205,499,819	549,542,198	531,019,849	194,115,306
Minimum	-24,119,771	-26,811,279	-515,443,699	-257,352,000	-259,348,000	-2,051,000,000
Maximum	25,440,000,000	26,872,000,000	1,829,394,000	5,288,000,000	6,042,000,000	894,000,000
Kurtosis	48.4	48.9	46.8	60.5	94.8	76.7
Asymmetry	6.6	6.7	6	7.5	9.1	-6.3
Negative	1%	1%	49%	22%	22%	45%
Positive	99%	99%	51%	78%	78%	55%
Non-zero	100%	100%	99%	100%	100%	99%
Number of observations	173	173	173	173	173	173

BV_{SEP}^{IGAAP} = book value of equity in separate financial statements under Italian GAAP; BV_{SEP}^{IFRS} = book value of equity in separate financial statements under IFRS; $BV_{SEP}^{IFRS\text{-}IGAAP}$ = book value reconciliation from Italian GAAP to IFRS in separate financial statements; NI_{SEP}^{IGAAP} = net income in separate financial statements under Italian GAAP; NI_{SEP}^{IFRS} = net income in separate financial statements under IFRS; $NI_{SEP}^{IFRS\text{-}IGAAP}$ = net income reconciliation from Italian GAAP to IFRS in separate financial statements.

Table 5 – Key financial ratios at the first time adoption of IFRS for separate financial statements

	Price to book value IGAAP(*)	Price to book value IFRS	Price to earnings IGAAP	Price to earnings IFRS	ROE (**) % IGAAP	ROE(**) % IFRS	ROA(***) % IGAAP	ROA(***) % IFRS	Total assets/book value IGAAP	Total assets/book value IFRS
Mean	2.99	3.02	46.45	34.74	2.45%	0.05%	2.53%	1.88%	2.44	2.43
Standard deviation	2.86	3.09	205.92	102.26	35.22%	45.90%	12.15%	13.04%	2.39	2.32
First quartile	1.36	1.37	4.62	4.81	1.13%	0.88%	0.45%	0.44%	1.43	1.42
Median	2.19	2.18	23.29	23.45	5.38%	5.43%	2.76%	2.45%	1.89	1.92
Third quartile	3.53	3.31	51.05	48.72	12.51%	12.34%	5.76%	5.30%	2.57	2.70
Minimum	-2.35	-2.23	-1,343.07	-391.69	-459.89%	-523.98%	-190.37%	-210.30%	-5.07	-4.81
Maximum	21.54	25.98	1,550.10	537.66	72.81%	71.87%	60.81%	60.13%	20.06	19.58
Kurtosis	13.10	21.03	33.38	8.92	5,606.34%	5,692.67%	1,481.68%	2,374.39%	35.97	33.69
Asymmetry	3.11	3.83	1.65	0.60	-627.68%	-702.04%	-115.22%	-193.41%	5.17	4.93
Number of observations	173	173	173	173	173	173	173	173	173	173

(*) IGAAP = Italian GAAP
(**) ROE = Net income 2006/Book value of equity 2006
(***) ROA = Net income 2006/ Total assets 2006

Table 6 – Descriptive statistics –Regression variables

	PPS	$BVPS_{SEP}^{IGAAP}$	$BVPS_{SEP}^{IFRS-IGAAP}$	$BVPS_{SEP}^{IFRS}$	$NIPS_{SEP}^{IGAAP}$	$NIPS_{SEP}^{IFRS-IGAAP}$	$NIPS_{SEP}^{IFRS}$	$BVPS_{SEP}^{IGAAP}$ X $NIPS_{SEP}^{IGAAP}$	$BVPS_{SEP}^{IFRS-IGAAP}$ X $NIPS_{SEP}^{IFRS-IGAAP}$	$BVPS_{SEP}^{IFRS}$ X $NIPS_{SEP}^{IFRS}$	$BVPS_{CON}$	$NIPS_{CON}$	$BVPS_{CON}$ X $NIPS_{CON}$
Mean	7.54	3.10	0.01	3.08	0.17	0.00	0.17	0.80	0.02	0.80	4.06	0.34	2.53
Standard deviation	7.03	2.88	0.15	2.84	0.26	0.06	0.27	1.32	0.06	1.69	3.68	0.46	4.65
First quartile	1.91	0.94	-0.09	0.92	0.01	-0.02	0.01	0.00	0.00	0.00	1.23	0.01	0.01
Median	5.13	2.16	0.00	2.06	0.11	0.00	0.10	0.16	0.00	0.20	2.73	0.20	0.43
Third quartile	10.85	4.20	0.09	4.04	0.32	0.03	0.33	1.06	0.00	1.05	5.95	0.56	2.35
Minimum	0.56	0.33	-0.26	0.32	-0.18	-0.13	-0.21	-0.33	-0.01	-2.02	0.43	-0.19	-2.31
Maximum	22.14	9.55	0.30	9.51	0.71	0.12	0.72	3.88	0.29	6.87	11.90	1.33	15.85
Number of observation	173	173	173	173	173	173	173	173	173	173	173	173	173

PPS = price per share; $BVPS_{SEP}^{IGAAP}$ = book value of equity per share in separate financial statements under Italian GAAP; $BVPS_{SEP}^{IFRS-IGAAP}$ = book value reconciliation per share from Italian GAAP to IFRS in separate financial statements; $BVPS_{SEP}^{IFRS}$ = book value of equity in separate financial statements under IFRS; $NIPS_{SEP}^{IGAAP}$ = net income per share in separate financial statements under Italian GAAP; $NIPS_{SEP}^{IFRS-IGAAP}$ = net income reconciliation per share from Italian GAAP to IFRS in separate financial statements; $NIPS_{SEP}^{IFRS}$ = net income per share in separate financial statements under IFRS; $BVPS_{CON}$ = consolidated book value of equity per share; $NIPS_{CON}$ = consolidated net income per share.

Table 7 – Pearson's correlation matrix

	$BVPS_{SEP}^{IGAAP}$	$BVPS_{SEP}^{IFRS\text{-}IGAAP}$	$BVPS_{SEP}^{IFRS}$	$NIPS_{SEP}^{IGAAP}$	$NIPS_{SEP}^{IFRS\text{-}IGAAP}$	$NIPS_{SEP}^{IFRS}$	$BVPS_{SEP}^{IGAAP}$ x $NIPS_{SEP}^{IGAAP}$	$BVPS_{SEP}^{IFRS\text{-}IGAAP}$ x $NIPS_{SEP}^{IFRS\text{-}IGAAP}$	$BVPS_{SEP}^{IFRS}$ x $NIPS_{SEP}^{IFRS}$	$BVPS_{CON}$	$NIPS_{CON}$	$BVPS_{CON}$ x $NIPS_{CON}$
PPS PONDERATO	0.79**	-0.04	0.78**	0.50**	0.05**	0.47**	0.60**	0.37**	0.52**	0.81**	0.65**	0.64**
$BVPS_{SEP}^{IGAAP}$		-0.05	0.99**	0.39**	0.14	0.38**	0.60**	0.39**	0.50**	0.90**	0.59**	0.68**
$BVPS_{SEP}^{IFRS\text{-}IGAAP}$			0.04	-0.04	0.26**	-0.02	-0.07	0.05	0.01	-0.05	-0.04	-0.07
$BVPS_{SEP}^{IFRS}$				0.37**	0.14	0.36**	0.58**	0.39**	0.49**	0.88**	0.59**	0.68**
$NIPS_{SEP}^{IGAAP}$					-0.10	0.95**	0.90**	0.00	0.83**	0.45**	0.65**	0.56**
$NIPS_{SEP}^{IFRS\text{-}IGAAP}$						0.12	-0.05	-0.02	0.04	0.12	-0.06	-0.06
$NIPS_{SEP}^{IFRS}$							0.86**	0.01	0.86**	0.44**	0.60**	0.50**
$BVPS_{SEP}^{IGAAP}$ x $NIPS_{SEP}^{IGAAP}$								0.09	0.89**	0.64**	0.69**	0.71**
$BVPS_{SEP}^{IFRS\text{-}IGAAP}$ x $NIPS_{SEP}^{IFRS\text{-}IGAAP}$									0.05	0.37**	0.23**	0.30**
$BVPS_{SEP}^{IFRS}$ x $NIPS_{SEP}^{IFRS}$										0.52**	0.60**	0.63**
$BVPS_{CON}$											0.68**	0.78**
$NIPS_{CON}$												0.91**

PPS = price per share; $BVPS_{SEP}^{IGAAP}$ = book value of equity per share in separate financial statements under Italian GAAP; $BVPS_{SEP}^{IGAAP}$ = book value of equity in separate financial statements per share under Italian GAAP; $BVPS_{SEP}^{IFRS\text{-}IGAAP}$ = book value reconciliation per share from Italian GAAP to IFRS in separate financial statements; $BVPS_{SEP}^{IFRS}$ = book value of equity in separate financial statements under IFRS; $NIPS_{SEP}^{IGAAP}$ = net income per share in separate financial statements under Italian GAAP; $NIPS_{SEP}^{IFRS\text{-}IGAAP}$ = net income reconciliation per share from Italian GAAP to IFRS in separate financial statements; $NIPS_{SEP}^{IFRS}$ = net income per share in separate financial statements under IFRS; $BVPS_{CON}$ = consolidated book value of equity per share; $NIPS_{CON}$ = consolidated net income per share.

*, **, *** p-value < 10%, 5%, 1%, respectively.

Table 8 – Value-relevance of separate and consolidated book value and net income

(1) $PPS_{it-30,t+60} = \alpha_0 + \alpha_1 BVPS_{it_{SEP}} + \alpha_2 NIPS_{it_{SEP}} + \alpha_3 BVPS_{it_{CON}} + \alpha_4 NIPS_{it_{CON}} + \varepsilon$

		Intercept	$BVPS_{it_{SEP}}$	$NIPS_{it_{SEP}}$	$BVPS_{it_{CON}}$	$NIPS_{it_{CON}}$	Adj. R^2	F-statistics	N
a)		1.29*** (2.81)			1.30*** (11.3)	2.91*** (3.16)	0.669	174.96***	173
b)	**Separate Financial Statements under Italian GAAP**	0.92** (2.07)	0.90*** (3.86)	3.42** (2.31)	0.64*** (3.12)	1.92* (1.88)	0.701	101.70***	173
c)	**Separate Financial Statements under IFRS**	0.93** (2.06)	0.74*** (3.31)	2.85** (2.05)	0.78*** (4.07)	2.06** (2.05)	0.692	97.45***	173
	Δ Adj. R^2 (b-a)						0.032***[5.01]		
	Δ Adj. R^2 (c-a)						0.023***[7.4]		
	Δ Adj. R^2 (c-b)						-0.009*[1.67]		

$PPS_{it-30,t+60}$ = price per share; $BVPS_{it_{SEP}}$ = book value of equity per share in separate financial statements; $NIPS_{it_{SEP}}$ = net income per share in separate financial statements; $BVPS_{it_{CON}}$ = consolidated book value of equity per share; $NIPS_{it_{CON}}$ = consolidated net income per share.

*, **, *** p-value < 10%, 5%, 1% respectively.

T-statistics for coefficients are in ( ).

Results are robust to hetereoskedasticy.

Stastistical significance of the differences in R^2 between regression a and regression b, or c, is tested with F-test. F-statistics is in [ ].

Statistical significance of the difference in R^2 between regression b and regression c is tested with Vuong (1989) test. Z-statistics is in [ ].

Table 9 – Value-relevance of book value and net income under Italian GAAP (IGAAP) and of reconciliation items to IFRS

(2) $PPS_{it-30,t+60} = \beta_0 + \beta_1 BVPS^{IGAAP}_{it_{SEP}} + \beta_2 BVPS^{IFRS-IGAAP}_{it_{SEP}} + \beta_3 NIPS^{IGAAP}_{it_{SEP}} + \beta_4 NIPS^{IFRS-IGAAP}_{it_{SEP}} + \beta_5 BVPS_{it_{CON}} + \beta_6 NIPS_{it_{CON}} + \varepsilon$

	Intercept	$BVPS^{IGAAP}_{it_{SEP}}$	$BVPS^{IFRS-IGAAP}_{it_{SEP}}$	$NIPS^{IGAAP}_{it_{SEP}}$	$NIPS^{IFRS-IGAAP}_{it_{SEP}}$	$BVPS_{it_{CON}}$	$NIPS_{it_{CON}}$	Adj. R^2	F-statistics	N
Coefficients	0.88** (1.98)	0.91*** (3.87)	0.78 (0.39)	3.34** (2.24)	-3.47 (-0.70)	0.65*** (3.21)	0.12** (1.76)	0.698	67.30***	173

$PPS_{it-30,t+60}$ = price per share; $BVPS^{IGAAP}_{it_{SEP}}$ = book value of equity per share in separate financial statements; $NIPS^{IGAAP}_{it_{SEP}}$ = net income per share in separate financial statements; $BVPS_{it_{CON}}$ = consolidated book value of equity; $NIPS_{it_{CON}}$ = consolidated net income.

T-statistics for regression coefficients are in ( ).

*, **, *** p-value < 10%, 5%, 1% respectively.

Results are robust to hetereoskedasticy.

Table 10 – Value-relevance of book value and net income –Product model

(4) $PPS_{it-30,t+60} = \delta_0 + \delta_1 BVPS_{it_{SEP}} + \delta_2 NIPS_{it_{SEP}} + \delta_3 BVPS_{it\,CON} + \delta_4 NIPS_{it\,CON} + \delta_5 BVPS_{it_{SEP}} \times NIPS_{it_{SEP}} + \delta_6 BVPS_{it\,CON} \times NIPS_{it\,CON} + \varepsilon$

	Intercept	$BVPS_{it_{SEP}}$	$NIPS_{it_{SEP}}$	$BVPS_{it_{SEP}} \times NIPS_{it_{SEP}}$	$BVPS_{it_{CON}}$	$NIPS_{it_{CON}}$	$BVPS_{it_{CON}}$ X $NIPS_{it_{CON}}$	Adj.	F-statistics	N
Separate Financial Statements under Italian GAAP	-0.10 (-0.192)	0.92*** (3.85)	4.95 (1.53)	-0.53 (-0.75)	0.91*** (4.36)	6.39*** (3.65)	-0.6*** (-3.08)	0.723	75.87***	173
Separate Financial Statements under IFRS	-0.04 (0.08)	0.58** (2.58)	-1.54 (-0.58)	0.65 (1.53)	1.16*** (5.60)	8.39*** (4.55)	-0.84*** (--4.02)	0.717	73.5***	173
Δ regression coefficient (b – a)										
Δ Adj. R²								-0.006 [0.72]		

$PPS_{it-30,t+60}$ = price per share; $BVPS_{it_{SEP}}$ = book value of equity per share in separate financial statements; $NIPS_{it_{SEP}}$ = net income per share in separate financial statements; $BVPS_{it_{CON}}$ = consolidated book value of equity per share; $NIPS_{it_{CON}}$ = consolidated net income per share.

T-statistics for regression coefficients are in ( ).

*, **, *** p-value < 10%, 5%, 1% respectively.

Results are robust to hetereoskedasticy.

Statistical significance of the difference in R^2 between regression b and regression c is tested with Vuong test. Z-statistics is in [ ]

Table 11 – Value-relevance of book value and net income under Italian GAAP and of reconciliation items to IFRS – Product model

$$(5)\ PPS_{it-30,t+60} = \eta_0 + \eta_1 BVPS_{it}^{IGAAP} + \eta_2 BVPS_{it}^{IFRS-IGAAP} + \eta_3 NIPS_{it}^{IGAAP} + \eta_4 NIPS_{it}^{IFRS-IGAAP} + \eta_5 NIPS_{it}^{IGAAP} x BVPS_{it}^{IGAAP} + \eta_6 NIPS_{it}^{IFRS-IGAAP} x BVPS_{it}^{IFRS-IGAAP} + \eta_7 BVPS_{it\,CON} + \eta_8 NIPS_{it\,CON} + \eta_9 BVPS_{it\,CON} \times NIPS_{it\,CON} + \varepsilon$$

Intercept	$BVPS_{it\,SEP}^{IGAAP}$	$NIPS_{it\,SEP}^{IGAAP}$	$BVPS_{it\,SEP}^{IFRS-IGAAP}$	$NIPS_{it\,SEP}^{IFRS-IGAAP}$	$BVPS_{it\,SEP}^{IGAAP}$ X $NIPS_{it\,SEP}^{IGAAP}$	$NIPS_{it\,SEP}^{IFRS-IGAAP}$ X $BVPS_{it\,SEP}^{IFRS-IGAAP}$	$BVPS_{it\,CON}$	$NIPS_{it\,CON}$	$BVPS_{it\,CON}$ X $NIPS_{it\,CON}$	Adj. R²	F-statistics	N
-0.11 (0.830)	0.83*** (3.42)	4.31 (1.34)	0.33 (0.017)	-5.36 (-1.12)	-0.26 (-0.37)	12.23** (2.18)	0.94*** (4.5)	6.76*** (3.88)	-0.70*** (-3.54)	0.729	52.49***	173

$PPS_{it-30,t+60}$ = price per share; $BVPS_{it\,SEP}^{IGAAP}$ = book value of equity per share in separate financial statements; $NIPS_{it\,SEP}^{IGAAP}$ = net income per share in separate financial statements; $BVPS_{SEP}^{IFRS-IGAAP}$ = book value reconciliation per share from Italian GAAP to IFRS in separate financial statements; $NIPS_{SEP}^{IFRS-IGAAP}$ = net income reconciliation per share from Italian GAAP to IFRS in separate financial statements; $BVPS_{it\,CON}$ = consolidated book value of equity; $NIPS_{it\,CON}$ = consolidated net income.

*, **, *** Coefficients are statistically significant at the 10%, 5%, 1% levels.

T-statistics are in ( ).

Results are robust to hetereoskedasticy.