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Reporting Comprehensive income issues: empirical evidence from France, Germany and Italy

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Abstract

In this paper we would like to investigate the issues related to the disclosure of comprehensive income in France, Germany and Italy. After the presentation of the literature about the reporting choices of the US entities, this research focuses on 600 listed entities and analyses data hand-collected from their 2009 and 2010 consolidated financial statements. More in detail, this work aims to investigate the choice of the statement which comprehensive income has been reported in, the correlation between the selected statement and the business size and the correlation between the format and the sign of the other comprehensive income components. Finally, it also investigates whether the difference between net income and comprehensive income is statistically significant. With regard to the choice of the prospect, literature shows that the US firms largely prefer the statement of changes in stockholders' equity, while in Europe, where such prospect cannot be chosen, entities prefer to disclose comprehensive income in the separate statement of net income and comprehensive income, probably to guarantee the separation between traditional revenues and costs and the other comprehensive income components. With regard to the correlations neither the business size nor the sign of other comprehensive income influence the choice of the prospect which comprehensive income has been reported in by the European entities included in our sample. Our final finding suggest that net income and comprehensive income disclosed by the entities analysed are statistically different from each other.

Keywords: IAS 1 revised, comprehensive income, net income.

1 – Introduction

In September 2007, the International Accounting Standard Board modified IAS 1 "Presentation of financial statements" in order to bring it largely into line with the US Statement of Financial Accounting Standard N° 130 "Reporting Comprehensive income"¹ (IASB, Exposure Draft of Proposed Amendments to IAS 1, IN § 4).

The statement of comprehensive income is by far the most relevant innovation introduced in IAS 1 revised (2007) that obliged entities to report comprehensive income in their annual reports.

¹In USA, the debate on the introduction of a statement with a measure of performance that reflected the changes in equity, not considering transactions with owners, started in the 1930s. Brief and Peasnell (1996) gave a systematic presentation of the authors who participated to this debate. Most of these scholars supported the so-called all-inclusive approach that allowed FASB, several years later, to issue SFAS 130 "Reporting comprehensive income".

FASB defined comprehensive income as "the change in equity [net assets] of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners"; as a result, it could be calculated by the sum of net income and other comprehensive income components (OCI). The most common ones are the effective portion of gains and losses on hedging instruments in a cash flow hedge, the gains and losses on remeasuring available-for-sale financial assets, the share of OCI of associates and joint ventures, accounted with the equity method, the gains and losses arising from translating the financial statements of a foreign operation and the actuarial gains and losses on defined benefit plans. Companies also disclose a residual category in which, for instance, the fair value changes of property, plant and equipment are included.

For the entities that comply with the IAS/IFRS, reporting comprehensive income has been an innovation because, according to the revised version of the IAS 1, as of fiscal year 2009, all the unrealized fair

value changes are disclosed in the statement of net income and comprehensive income, in the traditional income statement or as OCI components. Respect to profit or loss, comprehensive income on the one hand is more volatile, but on the other hand is able to give a more extensive measure of the performance of the entity that could be useful for users for their investment strategies. Its introduction in the countries where the national GAAPs did not allow fair value measurement, comprehensive income has been a revolution, instead. This is true especially in the countries investigated in this research (France, Germany and Italy) that the accounting literature considers "weak equity"².

As to the presentation matters, the international accounting standards issued by IASB and FASB give several possibilities to disclose comprehensive income. While according to IAS 1 revised (2007) it could be reported alternatively in a combined statement of net income and comprehensive income or in a separate statement of comprehensive income, SFAS 130 also allows its disclosure in a statement of changes in stockholders' equity. In June 2011, FASB has given a really contribution to the accounting standards harmonization, issuing "Accounting Standard Update No 2011-05 Comprehensive income (Topic 220): Presentation of Comprehensive income" that aimed to eliminate the possibility to report comprehensive income in the statement of changes in stockholders' equity, limiting its presentation either in a combined statement of net income and comprehensive income or in a separate statement of comprehensive income, like in the IAS/IFRS compliant countries. This is another small step towards convergence (Henry, 2011) that became effective for fiscal year beginning after 15th December 2011 for public entities and 15th December 2012 for non-public ones.

In this paper we contribute to the literature, investigating the comprehensive income reporting choices of French, German and Italian entities, both for 2009 and 2010. To the best of my knowledge this is the first paper that, focusing on the comprehensive income reporting issues, investigates systematically

the choice of the prospect which three IAS/IFRS compliant entities have shown comprehensive income in; the correlation between the format chosen and the business size, the correlation between the reporting choices and the sign of other comprehensive income components and, finally, the statistical significance of the difference between net income and comprehensive income. Continuing with the contribution to the literature, this is also the first paper that, to evaluate the weight of OCI components disclosed in annual reports, uses a test of hypothesis instead of the traditional descriptive statistics, very common in the international studies. So, respect to previous works, this is a strength that characterizes this paper respect to the ones that investigate similar topics. Moreover, for this aspect (weight of OCI components) other than contributing to the literature, this paper has implications for standard setters because, studying the statistical significance of the difference between net income and comprehensive income, our results suggest that standard setters should limit reporting discretion in issuing or amending accounting standards. The more the difference between net income and comprehensive income is significant the more insiders could behave opportunistically against outsiders, disclosing the OCI components in the less readable statements, when negative, or evidencing them in the clearer ones, otherwise. In this paper, four specific research questions are addressed. First, which statement has been chosen by French, German and Italian entities in fiscal years 2009 and 2010 to disclose comprehensive income and its components; second, whether such choice is correlated with the business size; third whether the choice of the prospect is correlated with the sign of OCI components and, finally, whether net income and comprehensive income are statistically different from each other or, in other words, whether the weight of the OCI components is relevant from a statistical point of view. We will answer to our research questions by collecting data from the 2009 and 2010 consolidated financial statements of 600 entities listed in the French, German and Italian stock markets. Indeed, the choice to include only fiscal years after 2009 is due to the fact that IAS 1 revised has become effective for the annual period beginning on or after 1st January 2009. This paper continues as follow. In section 2, we will present a systematic literature review about the reporting comprehensive income issues, with a particular focus on the US research, based on the North America longer tradition in reporting comprehensive income. In section 3, after presenting the selected countries and the entities included in the sample, we will show the most common descriptive statistics of all the data useful to answer to our research questions. In section 4, we will show the results of the empirical analysis. Section 5 is a conclusion of our work with a summary of findings, limitations and future further developments.

² These are the countries whose accounting policies are mainly based on the prudence concept, with very limited cases of revaluations and that, complying with the national accounting standards, disclose in their annual reports the so-called realized income (Sarcone, 2011; Ranalli, 2005; Capaldo, 1998). In these countries funds are provided mainly by banks and accounting systems are required to calculate prudent, reliable and often taxable income. Moreover, these are the countries where states and companies are controlled by families, banks or government acting as insider shareholders who can obtain direct information with limited or no needs of public disclosure (Nobes, 1998; Ali and Hwang, 2000).

2 – Literature review

In recent years, comprehensive income has been studied by several scholars, especially in the USA, where SFAS 130 "Reporting of comprehensive income", issued in June 1997, has been enforced since 1998³, more than 10 years before the enforcement of the IAS 1 revised (2007).

Despite of the high number of papers that focus on this topics, surprisingly most of them could be clustered into a couple of groups. The first one includes those investigations that involve issues related to the comprehensive income reporting choices, the latter those research that assessed its value relevance.

Not considering the theoretical papers, Table 1 summarizes most of the works published during the last decade (2003-2012). For each cluster, we distinguished those studies that focus on a specific industry and the ones that investigated comprehensive income referring to the whole sectors.

The table suggests that in recent years, fewer scholars investigated comprehensive income referring to a specific sector; as a matter of fact, most of them studied the comprehensive income reporting choices, (or its value relevance) with reference to all the industries.

This is also the aim of our paper; as a consequence, in this section we would like to systematically analyse the literature about these topics. The large majority of the referenced works will be research published by international scholars, because we recall, SFAS 130 has been issued earlier than the revised version of IAS 1. Therefore, in order to systematize the literature, the comprehensive income reporting issues investigated by international scholars are the following:

- the choice of the prospect in which entities have shown comprehensive income;
- the existence of a correlation between the format chosen and the business size;

- the existence of a correlation between the format chosen and the sign of other comprehensive income components;
- the statistical significance of the difference between net income and comprehensive income.

With regard to *the choice of the prospect*, we recall that the US accounting standard SFAS 130 allowed some flexibility on reporting comprehensive income, as it could be displayed alternatively in a performance-based prospect (a combined statement of net income and comprehensive income or a separate statement of comprehensive income) or in the statement of changes in stockholders' equity.

Previous evidences showed that most of the US companies have chosen the statement of changes in stockholders' equity, instead of a performance-based statement.

For instance, Campbell, Crawford and Franz (1999) analysed a sample of 73 companies which have voluntarily shown comprehensive income in the 1997 financial statements, one year before the SFAS 130 first-time adoption. They found that 39 of them reported comprehensive income in the statement of changes in stockholders' equity, 22 in the separate statement of comprehensive income and 12 in the combined statement of net income and comprehensive income.

Instead, Jordan and Clark (2002) observed the reporting choices of 100 firms belonging to the financial sector at the end of fiscal year 1998 and found that 63 companies chose the statement of changes in stockholders' equity, 25 companies the separate statement of comprehensive income and 12 the combined statement of net income and comprehensive income. Companies showed a preference for the statement of changes in stockholders' equity not only at the issuance or the adoption of SFAS 130, but also several years after.

As a matter of fact, five years after the adoption of SFAS 130, companies continued to prefer the presentation of comprehensive income in the statement of changes in stockholders' equity, as demonstrated by Pandit and Phillips (2004) who analysed the financial statements of a sample of 100 companies listed on the New York Stock Exchange, or by Mazza and Porco (2004) who studied a sample of 111 US-companies.

The former paper showed that 89 companies chose the statement of changes in stockholders' equity, 9 companies disclosed comprehensive income in the combined statement of net income and comprehensive income and only 2 companies in the separate one.

The latter argued that 83 of them chose the statement of changes in stockholders' equity, 14 the separate statement of comprehensive income and the residual 3 the combined statement of net income and comprehensive income.

³ Different from USA, the countries that adopted the IASB standards have not a longer tradition in reporting comprehensive income, so the number of the research on this topic is not very significant. In Italy, for example, at the date of IAS 1 revised first-time adoption, Cimini (2012), De Cristofaro & Falzago (2012) and Incollingo & Di Carlo (2010) investigated, with quantitative analysis, several aspects related with the entities' reporting choices. Several Italian scholars have also studied theoretical issues publishing books, book chapters or articles (Agliaata et al., 2010; Bellandi, 2009; Catuogno, 2007; D'Este and Fellegara, 2009; Devalle, 2010; Dezzani, et al., 2010; Di Lorenzo, 2009; Fiondella et al., 2012; Incollingo, 2008; Mechelli, 2008; Pisani, 2007 & 2011; Sarcone, 2011).

Table 1 – *A systematic literature review about comprehensive income in 2003-2012*

| | Reporting choices | Value relevance |
|------------------------|--|---|
| Specific sector | De Cristofaro and Falzago (2012) [service companies]; Shan and Dong (2012) [financial firms]; Pandit et al. (2006) [ICT firms]; Lee et al. (2006) [insurance companies]. | Cimini and Mechelli (2012) [financial firms]; Lin ('06) [industrial firms]; Brimble and Hodgson (2004) [industrial firms]; Louis (2003) [manufacturing firms]. |
| All the sectors | Cimini (2012); Incollingo and Di Carlo (2012); Bamber et al. (2010); Fernandez and Carro Arana (2010); Allegrini and Ninci (2007); Chambers et al. (2007); Mazza and Porco (2004); Pandit and Phillips (2004). | Azzali et al. (2012); Mechelli (2012); Fiori et al. (2012); Veltri and Ferraro (2012); Jones and Smith (2011); Pronobis & Hennis (2011); Goncharov and Hodgson (2011); Van Cauwenberge and De Beelde (2010); Fallatah and Talha (2009); Kanagaretnam et al. (2009); Mitra et al. (2009); Chambers et al. (2007); Bertoni et al. (2007); Biddle and Choi (2006); Kubota et al. (2006); Pinto (2005); Dehning and Ratliff (2004). |

Pandit, Rubenfield and Phillips (2006) focused on information and communication technology industry, collecting data from the financial statements of 100 companies listed in 2002 on NASDAQ, and obtained similar results.

All the studies above-cited limited their analysis on the companies' reporting choices to a specific year, but in literature there are several papers with longitudinal analysis.

Among them, Bhamornsiri and Wiggings (2001) gave a precious contribution studying the reporting choices between 1997 and 1999 of a sample of 100 US companies.

They found that 76 of these companies chose the statement of changes in stockholders' equity in each of the three reporting dates, validating the preference for such statement.

For the IAS/IFRS compliant entities, the first Italian scholars (Cimini, 2012; De Cristofaro & Falzago, 2012; Ferraro, 2011) that focused on the choice of the prospect concluded that at the time of first-time adoption of the revised version of IAS 1 (2007), the large majority of the entities preferred to disclose comprehensive income in a separate income statement, taking into account that IAS 1 revised does not allow the use of the statement of change in stockholders' equity.

With regard to the *existence of a correlation between the format chosen and the business size* Campbell, Crawford and Franz (1999) demonstrated that the companies that disclosed comprehensive income in the statement of changes in stockholders' equity are the larger ones; Pandit and Phillips (2004) arrived to similar results, although results were not statistically significant.

Previous studies about *the existence of a correlation between the format chosen and the sign of other*

comprehensive income showed that the higher and positive other comprehensive income, the more companies chose a performance-based statement, in order to give them evidence in their annual reports.

On the contrary, when negative, the companies preferred the statement of changes in stockholders' equity, that is less readable than the performance-based ones, in order to hide them.

The scholars who demonstrated such correlation were the already cited studies of Campbell, Crawford and Franz (1999) and Pandit and Phillips (2004), but also the works of Bamber et al. (2010).

More recently Shan and Dong (2012) investigated the comprehensive income reporting choices by analysing the annual reports of 200 commercial banks that comply with SFAS 130.

They found that those entities that reported negative other comprehensive income components and, between them, significant losses on remeasuring available-for-sale securities, not only disclosed comprehensive income in the statement of change in stockholders' equity, but also presented information in the footnotes of annual reports rather than in the primary statement.

Other than showing the preference of the entities, several scholars demonstrated that the attitude to hide other comprehensive income components in the statement of change in stockholders' equity contrasts with the outsiders' reporting predilections.

For instance, King, Ortegren and Reed (1999) demonstrated, through interviews, that while the large majority of the CFOs prefers a less readable prospect, such as the statement of changes in stockholders' equity, professional investors prefer to read comprehensive income in one of the performance-based statements because they facilitate the assessment of the traditional performance measures.

Hirst and Hopkins (1998) reached the same conclusion, explaining that the performance-based prospects are the best in terms of readability.

The CFOs' preference for the less clear statement of changes in stockholders' equity is due to the possibility to manipulate the perceived volatility of the firm's performance (Hirshleifer & Teoh, 2003; Yen et al. 2007; Maines & McDaniel 2000), but also avoids that users who perceive the firm's performance as more volatile will place a lower value on the stock and will assess the manager as less competent (Graham et al., 2005; Maines & McDaniel, 2000).

This is due to the fact that in literature, the statement of changes in stockholders' equity is considered less readable than the performance-based ones; Maines and McDaniel (2000) demonstrated that is true especially for nonprofessional investors, who prefer the separate statement of comprehensive income by far simpler to read.

Therefore, imagining that the previous research findings about the outsiders' preferences are representative, in presence of reporting discretion, when issuers decide to display comprehensive income and its components differently from these predilections, impression management⁴ occurs.

In other words, in case of reporting discretion, issuers could behave opportunistically against outsiders by concealing or exalting them in different manners when negative or positive, respectively.

This could be the reason why FASB amended SFAS 130 and obliged companies to disclose comprehensive income in a performance-based prospect. Talking about such amendment, the chairman of the FASB explained that they heard from investors "there was a need to present other comprehensive income information more prominently in financial statements and this update, which was developed jointly with the International

Accounting Standards Board, responds to those investor needs, and will bring greater consistency and

prominence to the reporting of other comprehensive income around the world".

With regard to the *statistical significance of the difference between net income and comprehensive income* fewer papers investigated whether this difference is significant from a statistical point of view. Between them, Kreuze and Newell (1999) wrote a paper entirely dedicated to the significance of each type of other comprehensive income component, selecting a sample of 100 companies among the 500 that, from 1995 and 1996, posted the best economic results in terms of turnover.

Their main findings are that in 1995, 27 companies had no other comprehensive income (in 1996 these companies were 24); in 20 companies the sum of the elements of other comprehensive income was more than 26% of net income (in 1996 these companies were only 7); in 53 companies the sum of the elements of other comprehensive income was between -25% and +25% of net income (in 1996 these companies were 69).

In their research they also explained the composition of the difference between net income and comprehensive income.

Taking into account that at the time of their study, SFAS 130 obliged companies to disclose foreign currency translation adjustments, the minimum pension liability adjustments and the unrealized gains or losses on available-for-sale investments separately, they found that such difference was mostly constituted by the unrealized gains or losses available-for-sale investments and by the foreign currency translation adjustments.

While the former were disclosed in large amounts but in fewer annual reports, the latter were disclosed in most of them, but their weights were not so relevant.

Also Campbell, Crawford and Franz (1999) gave another important contribution on this topic, showing that the companies which chose the statement of changes in stockholders' equity and disclosed negative other comprehensive income, other comprehensive income represented about 17% of net income.

Instead, in the ones with positive other comprehensive income, they represented about 57% of net income for companies that chose the combined statement of net income and comprehensive income and 81% of net income for companies that chose the separate statement of comprehensive income. The methodology adopted by these research suffers several limitations.

On the one hand, the scholars do not take into account compensations between OCI, then they have not used advanced statistical tools, such as the non-parametric tests of hypothesis, to verify whether the differences between matched-pair variables (net income and comprehensive income) are significantly different from zero.

⁴ Impression management is a strand of the financial disclosure literature that examines management's attempts to manage the interpretation of financial reports (Godfrey et al., 2003; Gibbins et al., 1990; Graves et al., 1996; Neu, 1991). Impression management cannot be confused with earnings management, that examines the insiders' attitude to manipulate numbers. In presence of impression management, managers and controlling owners have incentives to manage reported earnings in order to mask true firm performance and to conceal their private control benefits from outsiders. (Leuz et al., 2003). Despite of such different definitions, both impression management and earnings management generate information asymmetries (e.g. see also Fortuna and Mechelli 2010).

These tests could be useful to verify the magnitude of the insiders' opportunism against outsiders in terms of misrepresentation of the company performance.

The more net income and comprehensive income are statistically different from each other the more insiders' reporting choices could influence the interpretation of financial reports.

As a matter of fact, whether standard setters allow reporting discretion in the presentation of accounting numbers, insiders could opportunistically hide (evidence) the OCI components when negative (positive), against the interests of outsiders.

3 – Sample selection and descriptive statistics

The objective of this paper is to give a systematic framework of how companies listed in France, Germany and Italy reported comprehensive income in their consolidated annual reports in 2009 and 2010.

Following the existing research, we will mainly use descriptive statistics in order to verify the format chosen by companies, the existence of a correlation between this format, the business size and the sign of other comprehensive income components and finally to test whether the difference between net income and comprehensive income is statistically significant.

In order to achieve these goals, we hand-collected data from the consolidated financial statements of 600 entities, listed on the French, German and Italian stock markets.

While banks and other entities that belong to the financial sector have been included in the sample, the ones in bankruptcy and those that do not end the fiscal year on 31st December have been excluded.

Table 2 shows the composition of our sample, according to the country, which our entities are listed in.

Table 2 – *Nationality of the firms included in the sample*

| Nation | Number of firms | % |
|---------------|-----------------|-------------|
| France | 193 | 32% |
| Germany | 207 | 35% |
| Italy | 200 | 33% |
| Total: | 600 | 100% |

The three European countries are equally represented, as the number of listed companies included in the sample for each country is very similar. In Table 3 we would like to better describe our sample, clustering the 600 entities according to the sectors, which they belong to.

After this preliminary presentation of the sample, before moving to our research results, we tabulated several descriptive statistics of accounting numbers. In more detail, we provided descriptive statistics of net income, the single OCI components, the cumulated OCI and comprehensive income, first for the whole sample (see Table 4), then for the entities that belong to the financial sector (see Table 5).

More specifically about the cumulated OCI, we refer to the sum of the single OCI components disclosed in the annual report at each reporting date.

Table 4 shows the mean, the median, the skewness and the kurtosis for our accounting numbers, both for fiscal year 2009 and 2010 for the 600 entities listed in France, Germany and Italy.

Table 3 – *Sectors of the 600 firms included in the sample*

| Sectors | Number of firms | % |
|--|-----------------|------------|
| Automobiles and parts | 29 | 4 |
| Basic materials | 19 | 3 |
| Chemicals | 16 | 3 |
| Computers | 44 | 7 |
| Constructions and materials | 42 | 7 |
| Electronics | 33 | 6 |
| Finance | 57 | 10 |
| Food and beverages | 15 | 3 |
| Healthcare | 34 | 6 |
| Industrial goods and services | 33 | 6 |
| Media | 56 | 9 |
| Public utilities | 32 | 5 |
| Publishing and other business supports | 46 | 8 |
| Retailers | 20 | 3 |
| Software | 32 | 5 |
| Travel and leisure | 55 | 9 |
| Other sectors | 37 | 6 |
| Total: | 600 | 100 |

Results give the evidence that the single OCI components are not so common in the French, German and Italian annual reports.

As a matter of fact, with exception of foreign translation adjustments, their median values are always equal to zero.

We joined different results with the cumulated OCI, because their median values are null only in the 2009 French and Italian annual reports.

Table 4 – *Descriptive statistics* (,000.00/€) – *full sample*

| | Mean | Median | Skewness | Kurtosis | |
|-----------------------------|-----------------------------|-----------------------------|----------------------|----------------------|------------------|
| | 2009 2010 | 2009 2010 | 2009 2010 | 2009 2010 | |
| France (193 obs.) | Net income | 155,349 362,438 | 4,540 16,405 | 5.03 5.14 | 39.27 38.12 |
| | Cash flow hedge | -1,541 4,684 | 0 0 | 1.30 8.72 | 51.36 95.86 |
| | Available for sale | 43,638 -20,151 | 0 0 | 8.58 -10.1 | 78.77 117.2 |
| | Equity method | 24,411 8,030 | 0 0 | 13.70 13.36 | 189.54 183.65 |
| | Foreign transl. adjustments | 11,268 82,707 | 0 167 | 3.95 4.09 | 29.93 21.87 |
| | Defined benefit plans | -9,075 -4,172 | 0 0 | -10.33 -9.51 | 118.27 117.63 |
| | Other | 247 7,957 | 0 0 | 10.38 13.03 | 138.44 177.20 |
| | OCI | 68,948 79,057 | 0 236 | 7.29 3.43 | 59.54 23.99 |
| | Comprehensive income | 224,298 404,153 | 3,974 14,487 | 6.26 4.01 | 48.04 21.86 |
| | Net income | 442,422 664,427 | 4,737 12,545 | 13.14 13.22 | 181.74 183.21 |
| | Cash flow hedge | 1,321 -13,851 | 0 0 | 7.14 -9.86 | 92.94 120.66 |
| | Germany (207 obs.) | Available for sale | -11,068 -11,823 | 0 0 | -10.4 -6.98 |
| Equity method | | 1,777 -535 | 0 0 | 10.6 1.97 | 130.5 98.88 |
| Foreign transl. adjustments | | 25,260 110,047 | 1 857 | 6.01 5.93 | 46.89 48.33 |
| Defined benefit plans | | -21,574 -15,656 | 0 0 | -2.95 -7.28 | 32.44 61.06 |
| Other | | 4,667 1,723 | 0 0 | 10.7 11.01 | 132.2 136.97 |
| OCI | | 384 69,905 | 13 884 | -8.10 3.15 | 126.58 42.76 |
| Comprehensive income | | 434,256 721,493 | 5,212 12,157 | 12.66 13.01 | 173.06 180.24 |
| Net income | | 124,305 156,662 | 5,265 8,763 | 6.89 8.31 | 58.10 82.43 |
| Cash flow hedge | | -6,862 5,110 | 0 0 | -6.14 3.75 | 55.95 43.05 |
| Available for sale | | 38,307 -5,504 | 0 0 | 7.59 -1.06 | 69.47 45.43 |
| Equity method | | 244 2,476 | 0 0 | -1.49 6.68 | 32.65 49.67 |
| Italy (200 obs.) | | Foreign transl. adjustments | 10,224 52,498 | 0 84 | 4.09 7.12 |
| | Defined benefit plans | -1,393 -197 | 0 0 | -11.29 -7.19 | 138.24 72.63 |
| | Other | 948 3,856 | 0 0 | 12.67 12.11 | 176.09 164.38 |
| | OCI | 41,513 38,201 | 0 419 | 4.05 9.00 | 37.90 102.79 |
| | Comprehensive income | 165,818 194,863 | 6,811 9,753 | 6.70 7.71 | 54.02 67.33 |

Table 5 – *Descriptive statistics for the entities that belong to the financial sector*

| | | Mean | Median | Skewness | Kurtosis |
|--------------------------|--------------------|-------------|---------------|-----------------|-----------------|
| | | 2009 | 2009 | 2009 | 2009 |
| | | 2010 | 2010 | 2010 | 2010 |
| France (14 obs.) | Net income | 874,011 | 20,204 | 1.59 | 4.53 |
| | | 1,565,701 | 161,804 | 1.94 | 5.80 |
| | Available for sale | 469,221 | 0.00 | 1.97 | 5.02 |
| | | -234,171 | 0.00 | -2.76 | 9.29 |
| | OCI | 748,657 | 3,621 | 1.51 | 3.51 |
| | 90,155 | 0.00 | 1.61 | 6.77 | |
| Germany (14 obs.) | Net income | 489,188 | 49,038 | 0.09 | 4.60 |
| | | 874,122 | 76,817 | 2.04 | 6.50 |
| | Available for sale | 342,833 | 1,344 | 3.02 | 10.66 |
| | | -44,575 | 0.00 | -1.32 | 4.06 |
| | OCI | 333,867 | 53,429 | 3.24 | 11.70 |
| | 220,543 | 8,878 | 1.52 | 3.90 | |
| Italy (29 obs.) | Net income | 159,993 | 17,216 | 2.50 | 10.167 |
| | | 122,746 | 25,228 | 1.55 | 7.93 |
| | Available for sale | 195,363 | 15,747 | 3.05 | 12.67 |
| | | -28,267 | -421 | -0.32 | 10.36 |
| | OCI | 201,147 | 12,331 | 2.68 | 10.24 |
| | -8,338 | -5,238 | 2.88 | 20.23 | |
| Comprehensive income | | 361,139 | 49,543 | 3.13 | 11.44 |
| | | 114,409 | 9,848 | 1.91 | 7.72 |

The descriptive statistics displayed in Table 4 also suggests that in our accounting numbers there are outliers⁵.

⁵ We argue that outliers exist because the value of the mean of accounting data seems to be not similar to the matched-pair value of the median. Alternatively, we found that detecting outliers is simpler analysing the shape of their statistical distributions, looking at the kurtosis and the skewness values, as suggested in Joanes and Gill (1998). In all the countries, data have kurtosis coefficients typical of the distributions that are very far from the Gaussian one. In our case, being positive, they reveal leptokurtotic distributions, with acute peaks around the mean and fatter tails, where the probability to observe outliers is high. In order to understand if outliers are on the right or on the left hand side, we could look at the skewness indexes. We recall that whether these indexes are positive (negative), the tails on the right (left) are longer and the bulk of the values are on the left (right) of the mean with higher probability to observe outliers on the right (left). In our case, the skewness indexes of net income and comprehensive income are always positive; the ones of other comprehensive income are positive or negative according to the distribution of the fair value changes, instead. In order to confirm our

With accounting data this is not surprising and in our case it is due to the fact that the entities included in the sample belong to different economic sectors, and there are also financial institutions. For this reason, we also provided descriptive statistics of accounting numbers disclosed by financial institutions. With this regard, Table 5 shows the mean, the median, the skewness and the kurtosis of net income, cumulated OCI and comprehensive income. Between the single OCI components, we decided to provide descriptive statistics only for the unrealized gains and losses on available-for-sale securities, as we consider them the more persistent OCI components in the annual reports of banks and other financial institutions, because of the core business of such entities. Comparing this table with the previous one, we can argue that financial institutions disclosed higher cumulated OCI respect to non-financial entities, because of the unrealized gains and losses on available-for-sale securities that represent the more relevant and less transitory component.

findings and to verify that the statistical distributions are not Gaussian, we could also perform some tests for normality. Following D'Agostino, Balanger and D'Agostino Jr (1990) we got a confirmation that the shapes of our data distributions are very far from the Gaussian and that the probability to observe outliers is high.

Table 6 – Descriptive statistics of financial and governance indicators

| Panel a – 2009 | | | | Panel b – 2010 | | | | |
|--|----|-----------|-----------|----------------|--|-----------|-----------|-----------|
| | | France | Germany | Italy | | France | Germany | Italy |
| <i>mean</i> | | (193 obs) | (207 obs) | (200 obs) | | (193 obs) | (207 obs) | (200 obs) |
| <i>median</i> | | | | | | | | |
| ROA | % | 0.97 | 3.86 | 1.08 | | 4.41 | 5.46 | 2.32 |
| | | 2.25 | 3.65 | 1.34 | | 4.67 | 4.87 | 1.71 |
| Solvency ratio | % | 37.65 | 42.67 | 30.50 | | 38.99 | 43.04 | 30.58 |
| | | 36.81 | 41.09 | 29.35 | | 38.07 | 44.06 | 29.59 |
| Price earnings ratio | € | 31.37 | 34.14 | 31.35 | | 18.04 | 20.30 | 27.16 |
| | | 15.58 | 17.53 | 16.56 | | 12.54 | 15.70 | 14.49 |
| Mkt cap. (mil/€) | | 4,112 | 3,781 | 2,405 | | 3,765 | 4,422 | 2,208 |
| | | 166 | 198 | 313 | | 185 | 324 | 293 |
| Shareholders | N° | 26 | 26 | 38 | | | | |
| | | 19 | 23 | 22 | | | | |
| BvD independent indicator (N° of entities) | A | 57 (29%) | 66 (32%) | 33 (17%) | | | | |
| | B | 43 (22%) | 46 (22%) | 44 (22%) | | | | |
| | C | 10 (5%) | 7 (4%) | 16 (8%) | | | | |
| | D | 64 (33%) | 38 (18%) | 78 (39%) | | | | |
| | U | 19 (10%) | 50 (24%) | 29 (14%) | | | | |

In order to better qualify the entities included in the sample, Table 6 discloses the mean and the median of several financial and governance indicators. Between the financial indicators we calculated ROA, the solvency ratio, the price earnings ratio⁶ and the market capitalization both for fiscal year 2009 (panel a) and 2010 (panel b). Instead, between the governance indicators we considered the number of shareholders and the *BvD independent indicator* that is a measure of the ownership concentration⁷. As its rank is not

changed between 2009 and 2010 we tabulated such indicator only in panel a). Both the financial and governance indicators have been collected from the *Osiris* database. Panel a) and b) suggest that the German entities have the higher values of most of the financial indicators. As to the governance indicators, the percentage of independent entities, qualified with letters A and B are quite similar for each of the countries analysed, despite our data confirm that in Italy the ownership is more concentrated than in France and Germany, and so its entities are less independent. We recall that the similarities between the different indicators are due to the fact that France, Germany and Italy are considered by literature weak-equity countries.

Finally, Table 7 shows the linear correlation coefficients between our accounting, financial and governance variables and displays the p-value when such coefficients are statistically significant at 1%, 5% or 10%. It could be useful to remark the significant correlations of the cumulated OCI components. The Pearson correlation matrix suggests that they are negatively correlated with the solvency ratio in 2009 (-8%) and positively correlated with the number of shareholders in 2010 (+10%). Considering the number of shareholders a proxy of the size of the entity, this last correlation suggests that the bigger the entities, the higher is the number of cumulated OCI disclosed in annual report; our findings suggest that these are also the riskier entities, with lower solvency ratio.

⁶ Briefly, we would like to explain how our financial indicators have been calculated. While ROA is the ratio between EBIT and total assets, the solvency ratio has been calculated scaling the sum of after tax net profit and depreciation, with the sum of long and short term liabilities: according to a rule of thumb, financial healthy occurs when it is greater than 20%. Finally, to assess the price earnings ratio we considered the market price per share scaled to the annual earnings per share.

⁷ The BvD independent indicator is noted as A, B, C, D, U according to the following criteria:

| | |
|---|--|
| A | Attached to any company with known recorded shareholders none of which having more than 25% of direct or total ownership. |
| B | Attached to any company with a known recorded shareholder none of which with an ownership percentage (direct, total or calculated total) over 50%, but having one or more shareholders with an ownership percentage above 25%. |
| C | Attached to any company with a recorded shareholder with a total or a calculated total ownership over 50%. |

| | |
|---|---|
| D | This is allocated to any company with a recorded shareholder with a direct ownership of over 50%. |
|---|---|

| | |
|---|---------------------------------|
| U | Unknown degree of independence. |
|---|---------------------------------|

Table 7 – *The Pearson correlation matrix*

| 2009 2010 | Net income | OCI | Compreh. income | ROA | Solvency ratio | Price earnings ratio | N° shareholders |
|-------------------------|----------------------|---------------------|--------------------|----------------------|----------------------|----------------------------|--------------------|
| Net income | 1.00 1.00 | | | | | | |
| OCI | - 0.55*** 0.03 | 1.00 1.00 | | | | | |
| Compreh. Income | 0.99*** 0.99*** | -0.41*** 0.15*** | 1.00 1.00 | | | | |
| ROA | 0.03 0.01 | -0.05 -0.01 | 0.03 0.01 | 1.00 1.00 | | | |
| Solvency ratio | -0.04 -0.07 | -0.08* -0.02 | -0.07 -0.07 | 0.29*** 0.32*** | 1.00 1.00 | | |
| Price earnings ratio | -0.02 -0.03 | -0.02 -0.03 | -0.03 -0.03 | -0.18*** -0.22*** | 0.02 0.01 | 1.00 1.00 | |
| N° shareholders | 0.03 0.03 | 0.09 0.10** | 0.05 0.05 | 0.11** 0.08* | -0.21*** -0.21*** | -0.05 -0.01 | 1.00 1.00 |

(*) 10%, (**) 5% and (***) 1% level of significance

4 – Results

This section is dedicated to the presentation of the research results. The aspects investigated are the ones discussed in previous research, illustrated in section 2 of this work.

4.1 – *The choice of the prospect*

The choice of the prospect is the first issue that we investigated in our empirical work. We recall that the IAS/IFRS compliant entities have not the possibility to disclose comprehensive income in the statement of changes in stockholders' equity, but can use alternatively one of the performance-based statements. Therefore, also according to the new amendments to IAS 1, issued in June 2011, in the future, firms will have the possibility to choose the separate or the combined statement to disclose comprehensive income, despite IASB in the Exposure Draft would like to eliminate its presentation in the separate statement. (Exposure Draft 2010/5 "Presentation of items of other comprehensive income Proposed amendments to IAS 1").

For each country, Table 8 shows the number of the entities that chose the separate statement of comprehensive income or the combined one.

We would like to point out that in the following table we had not distinguished the 2009 from the 2010 reporting choices, because in 2010, respect to 2009, no entities have changed the prospect in which comprehensive income has been disclosed.

The separate statement of comprehensive income is largely the most chosen, as 87% of the entities preferred it both in 2009 and 2010.

With regard to the single countries, in France, Germany and Italy it has been chosen by 88,6% (171 over 193), 81,6% (169 over 207) and 91,5% (183 over 200) companies, respectively. This preference could be probably due to the possibility to isolate in a separate statement the other comprehensive income components from the traditional revenues and costs disclosed in the traditional income statement.

Table 8 – *The choice of a separate or a combined statement of comprehensive income*

| Countries | Separate statement (number of firms) | Combined statement (number of firms) | Total: |
|---------------|---|---|----------------------|
| France | 171 | 22 | 193 |
| Germany | 169 | 38 | 207 |
| Italy | <u>183</u> | <u>17</u> | <u>200</u> |
| Total: | 523 (87%) | 77 (13%) | 600 (100%) |

We would like to investigate whether the absence of other comprehensive income components is the reason that led firms to choose the combined statement instead of the separate statement of comprehensive income.

Table 9 shows, for each fiscal year, the number of companies that preferred the combined statement, the number of those with no other comprehensive income and the difference between them. Our findings suggest that the number of entities where net income is equal to comprehensive income is very close to the number of those that chose the combined statement of net income and comprehensive income.

Table 9 – Number of firms which chose the combined statement with O.C.I.=0

| Countries | Combined statement (number of firms) | O.C.I. = 0 | | Δ | |
|-----------|---|------------|------|------|------|
| | | 2009 | 2010 | 2009 | 2010 |
| France | 22 | 21 | 41 | 1 | -19 |
| Germany | 38 | 14 | 13 | 24 | 25 |
| Italy | 17 | 21 | 19 | -4 | -2 |

This is true especially in France and Italy at the reporting date of IAS 1 revised first-time adoption (2009) and mainly in Italy, one year later (2010).

So, we can conclude that only in some circumstances companies with other comprehensive income components equal to zero preferred the combined statement of comprehensive income. This is the reason why, in the next sections, we would like to find out whether there are other elements (different from the amount of OCI components) that influenced the comprehensive income reporting choices, such as the business size (§ 4.2) and the sign of other comprehensive income components (§ 4.3).

4.2 – The correlation between the format chosen and the business size

In this second step of our work we investigated whether the business size influenced the firms' reporting choices. Literature suggests that the natural logarithm⁸ of total assets could be a measure that distinguishes the bigger companies from the smaller ones (Smyth, Boyes and Peseau, 1975; Van Tendeloo and Vanstraelen, 2005). Splitting the variable at the median, the bigger companies have the natural logarithm of total assets over the median, the smaller ones under the median. Table 10 summarizes the number of firms which chose the separate and the combined statement, distinguishing the bigger companies from the smaller ones. The table shows that the firms' size has not affected the choice of the separate statement of net income and comprehensive income, as the number of bigger companies that chose this prospect is close to the number of the smaller ones. So, there are other factors, still not analysed, that influenced the choice of the separate statements. On the contrary, the table suggests that most of the companies that chose the combined statement are small entities in France, Germany and Italy both in 2009 and 2010.

⁸ Colin, Cameron and Trivedi (2008) explained that using the natural logarithm eliminates the skewness and the excess of kurtosis, allowing to work with variables whose statistical distributions are quite similar to the Gaussian.

Table 10 – The choice of the prospect and the size of the firms

| Countries | Size | Separate statement (number of firms) | | Combined statement (number of firms) | | Total: |
|---------------|---------------|---|------------|---|-----------|------------|
| | | 2009 | 2010 | 2009 | 2010 | |
| France | Bigger firms | 85 | 83 | 8 | 7 | 193 |
| | Smaller firms | 86 | 88 | 14 | 15 | |
| Germany | Bigger firms | 93 | 91 | 3 | 3 | 207 |
| | Smaller firms | 76 | 78 | 35 | 35 | |
| Italy | Bigger firms | 108 | 105 | 5 | 5 | 200 |
| | Smaller firms | 75 | 78 | 12 | 12 | |
| Total: | | 523 | 523 | 77 | 77 | 600 |

Table 11 extends our analysis on smaller companies, because other than considering the size of the entity, it associates the number of entities that chose the combined statement with the ones with other comprehensive income equal to zero.

Table 11 – The O.C.I. amount, the size of the firms and the choice of the prospect

| Countries | Size | Combined O.C.I. = 0 statement | | Δ | | | |
|-----------|---------------|----------------------------------|------|------|------|----|-----|
| | | 2009 | 2010 | 2009 | 2010 | | |
| France | Bigger firms | 8 | 7 | 4 | 7 | 4 | 0 |
| | Smaller firms | 14 | 15 | 17 | 34 | -3 | -19 |
| Germany | Bigger firms | 3 | 3 | 1 | 1 | 2 | 2 |
| | Smaller firms | 35 | 35 | 13 | 12 | 22 | 23 |
| Italy | Bigger firms | 5 | 5 | 4 | 3 | 1 | 2 |
| | Smaller firms | 12 | 12 | 17 | 16 | -5 | -4 |

Table 10 and 11 allowed us to conclude that both in 2009 and 2010 most of French and Italian smaller entities with no other comprehensive income chose the combined statement. Differently from France and Italy, the number of German smaller entities that chose the combined statement is higher than the number of firms of the same size with other comprehensive income equal to zero, suggesting that there are other factors, other than the amount of the other comprehensive income components, that led such entities to choose this statement.

4.3 – The correlation between the format chosen and the sign of other comprehensive income components

The investigation of the correlation between the sign of OCI components and the prospect chosen to disclose them is useful to evaluate the insiders' attitude to mislead the investors' perception of the company performance. Table 12 (for fiscal year 2009) and Table 13 (for fiscal year 2010) show, for each country, the number of firms with positive or negative other comprehensive income components that chose the separate statement or the combined statement, distinguishing the bigger firms from the smaller ones.

Table 12 – *The sign of other comprehensive income in fiscal year 2009*

| Fiscal year 2009 | | Separate statement | | Combined statement | |
|------------------|------------|--------------------|---------------|--------------------|---------------|
| | | Bigger firms | Smaller firms | Bigger firms | Smaller firms |
| France | O.C.I. > 0 | 42 | 34 | 4 | 4 |
| | O.C.I. ≤ 0 | 43 | 52 | 4 | 10 |
| Germany | O.C.I. > 0 | 53 | 38 | 2 | 18 |
| | O.C.I. ≤ 0 | 40 | 38 | 1 | 17 |
| Italy | O.C.I. > 0 | 64 | 28 | 1 | 2 |
| | O.C.I. ≤ 0 | 20 | 71 | 2 | 12 |

In 2009, the sign of other comprehensive income had not influenced the choice of the prospect because for both the statements the number of bigger and smaller companies with positive OCI is quite similar to the number of firms with negative OCI.

Table 13 – *The sign of other comprehensive income in fiscal year 2010*

| Fiscal year 2010 | | Separate statement | | Combined statement | |
|------------------|------------|--------------------|---------------|--------------------|---------------|
| | | Bigger firms | Smaller firms | Bigger firms | Smaller firms |
| France | O.C.I. > 0 | 62 | 49 | 4 | 6 |
| | O.C.I. ≤ 0 | 21 | 39 | 3 | 9 |
| Germany | O.C.I. > 0 | 79 | 47 | 0 | 23 |
| | O.C.I. ≤ 0 | 12 | 31 | 3 | 12 |
| Italy | O.C.I. > 0 | 62 | 54 | 1 | 4 |
| | O.C.I. ≤ 0 | 42 | 25 | 4 | 8 |

Also in 2010, there is evidence that the sign of other comprehensive income had not influenced the choice of the prospect.

As a matter of fact, comparing Table 13 with Table 12, we can see that in 2010 the number of firms that reported positive other comprehensive income components increased, but as we said above, none of the companies included in the sample decided to change the prospect which disclosed comprehensive income in.

For this reason we can argue that the sign of other comprehensive income components has not influenced the choice of the statement where they have been disclosed.

4.4 – The statistical significance of the difference between net income and comprehensive income

There are two approaches useful to evaluate the difference between net income and comprehensive income.

The so-called "traditional approach" is very common in literature and mainly uses descriptive statistics in order to evaluate the weight of other comprehensive income components with respect to net income. Instead, the so-called "statistical approach" has the same objective but involves the use of advanced statistical tools (e.g. tests of hypothesis).

With the "traditional approach" we refer to those studies that evaluated the weight of other comprehensive income with respect to net income, as suggested in the following table.

Table 14 – *The weight (%) of other comprehensive income respect to net income (n° of firms)*

| Countries | x < -75 | -75 < x < -25 | 25 < x < +25 | 25 < x < 75 | x > 75 |
|----------------|--------------|---------------|--------------|--------------|--------------|
| | 2009 2010 | 2009 2010 | 2009 2010 | 2009 2010 | 2009 2010 |
| France | 5 3 | 21 7 | 144 139 | 12 36 | 11 8 |
| Germany | 8 9 | 13 16 | 156 132 | 16 32 | 14 18 |
| Italy | 10 17 | 11 13 | 145 129 | 19 24 | 15 17 |
| Total: | 23 29 | 45 36 | 445 400 | 47 92 | 40 43 |

$$x = (\sum \text{OCI}) / \text{N.I.}$$

Table 14 suggests that other comprehensive income components that belong to the central interval (-25% and +25%) are 445 in 2009 (74%) and 400 in 2010 (67%) so other comprehensive income seems not to have a significant weight. As a matter of fact, the number of entities whose OCI components belong to other clusters is by far lower than the number of entities that belong to the central interval. Also Table 4 "Descriptive statistics" confirmed such result, show-

ing that most of the median values of single OCI components are equal to zero.

The results of the “traditional approach”, widely used in literature, is not convincing and less robust than those obtained by using the other approach. Therefore, to evaluate the weight of OCI components, we followed the “statistical approach”, by performing the non-parametric Wilcoxon (1945) signed-rank test. This test compares net income and comprehensive income under the null hypothesis that no statistical differences exist between their distributions⁹.

Table 15 tested the null hypothesis for each of the countries analysed and then considering them all together. While the first panel refers to all the entities that belong to the sample (see Table 15, panel a), in the second one we tested the null hypothesis for non-financial entities (see Table 15, panel b); finally, in the third panel, we tested the same hypothesis for the financial entities (see Table 15, panel c).

Table 15 – *Results of Wilcoxon signed-rank test*

| Panel a) Full sample | Wilcoxon signed-rank test $H_0 = (N. I. = C.I.)$ | |
|------------------------------------|---|-----------------------|
| | 2009 | 2010 |
| France | <i>p-value</i> = 0.58 | <i>p-value</i> = 0.00 |
| Germany | <i>p-value</i> = 0.01 | <i>p-value</i> = 0.00 |
| Italy | <i>p-value</i> = 0.00 | <i>p-value</i> = 0.00 |
| Aggregate | <i>p-value</i> = 0.00 | <i>p-value</i> = 0.00 |
| Panel b) Non-financial entities | Wilcoxon signed-rank test $H_0 = (N. I. = C.I.)$ | |
| | 2009 | 2010 |
| France | <i>p-value</i> = 0.99 | <i>p-value</i> = 0.00 |
| Germany | <i>p-value</i> = 0.07 | <i>p-value</i> = 0.00 |
| Italy | <i>p-value</i> = 0.99 | <i>p-value</i> = 0.00 |
| Aggregate | <i>p-value</i> = 0.27 | <i>p-value</i> = 0.00 |
| Panel c) Financial entities | Wilcoxon signed-rank test $H_0 = (N. I. = C.I.)$ | |
| | 2009 | 2010 |
| France | <i>p-value</i> = 0.05 | <i>p-value</i> = 0.66 |
| Germany | <i>p-value</i> = 0.01 | <i>p-value</i> = 0.14 |
| Italy | <i>p-value</i> = 0.00 | <i>p-value</i> = 0.03 |
| Aggregate | <i>p-value</i> = 0.00 | <i>p-value</i> = 0.60 |

⁹ The choice of this non-parametric test is due to the fact that the distributions of our data are not Gaussian (e.g. see the section of this work dedicated to descriptive statistics).

Table 15, panel a) shows that only in France, for fiscal year 2009, we fail to reject the null hypothesis that net income and comprehensive income are equal from a statistical point of view, because in Germany and Italy – and considering the three countries all together –, the test led us to reject the null hypothesis of equality of the matched-pair observations of net income and comprehensive income (*p-values* ≤ 0.01).

Instead, in 2010, the test of Wilcoxon led us to reject the null hypothesis of equality of matched-pair observations (*p-values* ≤ 0.01), so the weight of OCI components is always statistically significant, being net income different from comprehensive income.

We repeated this test both for non-financial entities and for the financial ones.

As to non-financial entities, panel b) suggests that, in 2009, the difference between net income and comprehensive income is never significant and so the weight of OCI components is never relevant at the traditional level (*p-values* ≥ 0.05). On the contrary, in 2010, the weight of OCI components is always statistically relevant, so net income and comprehensive income could be considered different from a statistically point of view (*p-value* ≤ 0.01).

As to financial entities, panel c) suggests that, in 2009, the difference between net income and comprehensive income is always significant, so the weight of OCI components is relevant (*p-values* ≤ 0.05). Instead, in 2010, the weight of OCI components is never statistically relevant at the traditional level of significance, except in Italy, where the weight of OCI components of banks and other financial institutions continues to be relevant (*p-value* ≤ 0.05).

5 – Conclusions, limitations and future developments

This paper contributes to the debate on reporting comprehensive income through the analysis of the consolidated financial statements of a sample of 600 French, German and Italian listed entities.

After the presentation of an extended literature review, our study has shown the preference of the entities included in the sample for the separate statement of net income and comprehensive income and it has also investigated the reasons that led them to choose a specific prospect. More in detail, we found that in 2009 and 2010 the entities that preferred the combined statement were generally the smaller ones, with no other comprehensive income components.

Detecting the reasons why the majority of the companies chose the separate statement has been more difficult, considering that neither the business size nor the sign of the other comprehensive income components influenced the choice of the prospect in which comprehensive income has been disclosed.

We suppose that the main factor that influenced the predilection for a separate statement was the willingness to report other comprehensive income components separately from the traditional revenues and costs. The IASB Chairman, commenting on the amendments to IAS 1 of June 2011, could confirm our thesis; he commented the decision of the Standard setter to guarantee the possibility to disclose comprehensive income in the separate statement (despite IASB, in the Exposure Draft, would like to eliminate this possibility) reassuring firms that "these amendments maintain an appropriate separation between O.C.I. and profit or loss".

In our opinion, the companies' predilection for the separate statement suggests that European countries are not yet ready to report other comprehensive income together with the traditional revenues and costs, in a single statement; therefore they prefer the separate statement. As a matter of fact, by selecting the combined statement, being comprehensive income the last item of annual report, because of its volatility, insiders are afraid that investors could underestimate the firms' profitability, especially during financial crises. Sura (2010) recalled that according to a PWC research, net income is considered by analysts the key performance indicator of the performance of the entity, so at the "bottom line" investors should read net income instead of comprehensive income.

These are the reasons why, in Europe, issuers prefer to disclose comprehensive income in a separate statement, considered by them a sort of "appendix" to the traditional income statement.

With regard to the significance of the difference between net income and comprehensive income, we found that comparing net income and comprehensive income of the 600 entities included in the sample, at aggregate level, the weight of OCI components is always statistically relevant, both for 2009 and 2010. After clustering entities in financial and non-financial, we can conclude that OCI components disclosed by financial institutions in 2009 (see panel c) contribute to give relevance to the weight of OCI components disclosed in 2009 by the 600 entities analysed (see panel a); otherwise, in 2010, the OCI components of non-financial institutions contribute to give relevance to the weight of OCI components disclosed by entities that belong to the full sample.

In the final step of our research, the Wilcoxon (1945) signed-rank test has been useful to assess the magnitude of the insiders' opportunism. As a matter of fact, the more net income and comprehensive income are different from each other, the more insiders could behave opportunistically against outsiders exercising reporting discretion, exalting positive OCI or hiding the negative ones, in order to influence the outsiders' perception of the performance of the entity. So, standard setters should limit reporting discretion, avoiding the presentation of accounting numbers in

those statements that could be not so clear for investors.

Not allowing the presentation of comprehensive income in the statement of changes in stockholders' equity, IASB limited opportunism and avoided the so-called impression management. Speaking different, in the IAS/IFRS compliant entities impression management is only potential and not expressed, like in the USA, because despite of the relevant weight of OCI components, impression management cannot occur because of the choice of the standard setter to avoid the presentation of comprehensive income and OCI components in the less clear statement of changes in stockholders' equity.

The main limitation of this research is the fact that we investigated the comprehensive income reporting choices of the entities listed in only three European countries, whose markets are considered "weak equity".

Therefore, future research could focus on an extension of our analysis, including in the sample entities listed in other IAS/IFRS compliant countries that could be both weak equity or strong equity countries. Including weak equity countries could be useful to guarantee an exhaustive investigation of the comprehensive income reporting choices in such countries; including the strong equity ones could allow comparing and contrasting the reporting choices between these two groups of countries.

Further research, other than enlarging the sample size, could also collect data for a longer period, in order to verify whether the reporting choices across European Union over time are similar to the ones discussed in this paper.

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