IFRS Adoption in Italy:

Which Effects on Accounting Figures and Subjectivity?

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Abstract

The issue about the degree of subjectivity incidental to financial statements is topical, although it has long been studied and debated. Indeed, such issue recurs any time new accounting rules or standards are issued. And, of course, it recurs in case of a complete renovation of the accounting system of reference, such as the one that took place in Europe in 2005, when all listed companies were required to repeal their national accounting rules and GAAP, and to adopt IFRS for the preparation of their consolidated financial statements.

This study focuses on such transition with specific reference to the Italian context and explores three interconnected issues: *a)* identification of the changes in the evaluation criteria – from the Italian regulations and GAAP to IFRS – which actually impact on the financial statements presented by Italian companies in the year of transition; *b)* appreciation of the importance of such impacts, based on (1) how often each adjustment recurs; (2) whether they determine an increase or decrease in accounting figures and (3) how relevant their effects are on the main accounting figures, namely net earnings and net capital; *c)* discussion about the managerial discretion introduced by the most impacting evaluation criteria identified, in comparison with the Italian provisions and GAAP previously applied.

The overall analysis demonstrates that IFRS introduction determined wide impacts on financial statements, affecting most assets and liabilities, but its impacts on accounting figures were less significant than could be expected. In terms of subjectivity, however, differences are very significant.

Keywords: IFRS, Subjectivity, Financial statements, First-time adoption, Italy

1. Introduction

Issues as to the most appropriate manner to record assets and liabilities in the balance sheet and to reflect their changes in value in the income statements have been integral to financial reporting since a long time ago. Moreover, evaluation approaches evolve over time, as well as the idea of the most appropriate way to achieve that "true and fair view" that any financial statement is required to provide to the benefit of its stakeholders – for example, we recently assisted to a progressive and extensive introduction of the principle of "fair value", instead of the "historical cost" (Gwilliam & Jackson, 2008; Georgiou & Jack, 2011) –.

In 2002, within the European Union (EU), this trend towards the improvement of the quality of financial statements led to the enforcement of a new regulation concerning the preparation of financial statements by companies listed in European financial markets (Note 1). Such regulation immediately appeared considerably different from the previous European Union Fourth Accounting Directive of 1978 on individual accounts and the Seventh Accounting Directive of 1983 on consolidated accounts, as it pursued *accounting homogenization* all around the EU, instead of a lighter *accounting harmonization*. And the homogenization did not consist in a more strict formulation of existing provisions about the balance sheet and income statement schemes, classification rules and evaluation criteria; differently, it consisted in the adoption of an entirely new system of accounting standards issued by the International Accounting Standards Board (IASB), a highly professional independent organization supported by industry and governments throughout the world and deputed to issue a single set of high-quality, understandable, enforceable and globally accepted accounting principles (http://www.ifrs.org/The-organisation/Pages/IFRS-Foundation-and-the-IASB.aspx).

The legislative intervention operated by the EU was so important that within Europe it is often referred to as an “accounting revolution” and as “the biggest change to financial reporting in Europe in 30 years”, both for the number of companies directly affected by this novelty – about 9,000 EU-listed companies – and also for the innovative content of some IFRS compared to national regulations and GAAP formulated in the single EU State members in accordance with previous EU Accounting Directives – in particular as far as criteria for the year-end evaluation of assets and liabilities are concerned – (Jermakowicz & Gornik-Tomaszewski, 2006, pp. 43-45; Hoogendoorn, 2006; Pope & McLean, 2011; Ahmed, Chalmers & Khlif, 2013) (Note 2).

Notwithstanding the direction undertaken by accounting bodies, it remains that any modification in the evaluation criteria for assets and liabilities impacts on specific accounting figures, and ultimately on net income and equity, and leads to a modification of the degree of subjectivity available to preparers of financial statements.

This is, specifically, the issue we investigate in this study, taking as reference the transition from national accounting rules and GAAP to IFRS in Italy. More specifically, the study explores three interconnected questions:

1. Which changes to the evaluation criteria – from Italian regulation and GAAP to IFRS – do have an actual impact on the financial statements presented by Italian companies?
2. Having identified the changes to evaluation criteria which affect accounting figures, what is the magnitude of such effects on net income and equity?
3. Having considered the changes to evaluation criteria and also their effects on accounting figures, which are the impacts on the subjectivity of the most relevant adjustments identified?

In order to provide an answer to the first question, we empirically investigate the reconciliation schemes provided by Italian listed companies in the year of transition to IFRS and take note of the accounting standards, and the specific evaluation criteria therein, which affect two main accounting figures, namely net income and equity.

As far as the second objective is concerned, we consider (1) how often the identified adjustments recur, (2) whether they determine an increase or decrease in net income and equity while moving from the Italian GAAP to IFRS, still based on said reconciliation schemes, and (3) their relevance.

Finally, referring to the third objective, we go back to the most significant transition adjustments and underline the effects of the new and different evaluation criteria provided for by IFRS on the degree of subjectivity in financial statements, compared with the evaluation criteria stated for the same assets and/or liabilities by the Italian regulation and GAAP. The most significant adjustments are selected, respectively, based on how often they recur, their relevance, and degree of novelty of the evaluation criteria compared to the national ones.

The choice of Italy as the context of reference for our study is based on three main reasons:

— first of all, Italy is in all likelihood the European country with the longest accounting tradition. This explains why the accounting literature developed in Italy has far-back studied the issue of subjectivity of year-end accounting figures with extreme accuracy (see *infra* par. 2.1);

— secondly – and in direct connection with the previous point –, the Italian accounting tradition has always led the national legislator to tie regulations on financial statement to the principle of prudence and to the historical cost, traditionally regarded as the evaluation criteria of reference, consistently with the primary objective assigned to financial statements, *i.e.*, to protect creditors. In the Italian accounting regulation the purpose of providing information that is useful in making economic decisions is in fact a subordinated one. As a consequence, the transition to IFRS entails a significant cultural change and notable operational changes in the preparation of financial reports: indeed, IFRS downgrade prudence as a built-in characteristic of financial statements, combine fair value measurements with the historical cost, and strongly adhere to the decision-usefulness approach to financial statements, which leads at considering financial statements as an essential tool to reduce the information asymmetry existing between users and preparers of financial statements. The context described, we believe, makes the analysis of the effects of the IFRS adoption in Italy very interesting;

— finally, Italy offers a useful setting to investigate the transition to IFRS because it is to some extent representative of those other countries that have adopted IFRS, and present institutional characteristics similar to Italy, such as: *a)* codified law system; *b)* weak legal protection to investors and creditors; *c)* weak legal enforcement system; *d)* low quality of accounting standards; *e)* high ownership concentration (as a consequence of the poor investor protection) (La Porta et al., 1998). Indeed, the accounting literature shows that IFRS have been adopted with a certain “local flavor” based on previous habits and consistent to a general desire to achieve a presentation as close as possible to whatever was previously provided under local standards (Durocher & Gendron, 2011); moreover, national institutional factors influence managers’ accounting policy choices under IFRS. That being stated, Italy seems to be a good exemplification of the dynamics underlying the transition to IFRS in those countries with similar institutional background and "country specifics".

The remainder of this contribution is structured as follows: Section 2 presents the background on subjectivity and the process of transition to IFRS. Section 3 provides a brief description of the selected sample and research design on which the following Sections are based. Section 4 illustrates the evaluation criteria provided for by IFRS which impacted on Italian companies' accounting figures in the year of transition. Section 5 deals with the analysis of the adjustments to net capital and net income, in order to appreciate (1) how often each adjustment recurs; (2) whether it determines an increase or decrease in accounting figures and (3) its relevance. To conclude, Section 6 discusses the main results in light of subjectivity and opens to the conclusions of the study in Section 7.

2. Background and literature

As specified above, this study investigates the issue of subjectivity in financial statements, with specific reference to the effects of IFRS adoption on subjectivity itself. Therefore, the issue under investigation entails a thorough analysis of two topics, strictly related to each other: 1) the degree of subjectivity in financial statements; 2) the transition from GAAP to IFRS accounting principles. Such analysis is developed in the following subparagraphs. In particular:

- subparagraph *2.1* provides a brief description of the basic factors which give rise to subjectivity in financial statements according to the accounting doctrine and literature, and specifies the relations between subjectivity and earnings management, as well as between subjectivity and reliability;
- subparagraph *2.2* briefly recalls the changes in regulation which led to the IFRS adoption in Italy and provides essential references to the literature on this topic, shedding light on the contributions of our paper.

2.1 Subjectivity

The degree of subjectivity in financial statements is an extremely current issue, despite the fact that it originated a long time ago (Note 3).

The presentation of financial statements is a mandatory requirement as such documents represent the main tool of information and periodic communication for those who have a direct or indirect interest in being informed about the financial situation of a company (i.e., its stakeholders). These subjects, holding an interest that is worth being protected, can therefore rely on the periodicity – mandatory and governed by the law – of financial statements. Such periodicity requires what can be referred to as an '*interruption*' of the regular flowing of the business management – to assess both income and capital.

As a consequence of the above mentioned discontinuity, subjective values – which unlike objective values create a dependency relation between the amount to be assessed and the subject carrying out the assessment – will find their way into the financial statements. This is due to the fact that such values imply both *a)* a process of abstraction and *b)* forecasts, as largely discussed within the Italian accounting literature.

a) The process of abstraction is made necessary by the need to ignore space-time links characterizing the situation reflected in the financial statements.

The business management is an integrated process (Onida, 1971), and this entails that every time the relations between the different managing processes are ignored, some abstractions are necessary for a scientific study of reality. The above mentioned relations unfold into both space and time.

With reference to *time*, such relations imbue the processes which – in a diachronic perspective – flow alongside the business management. As a consequence, any attempt to "separate chronologically" a segment of the business management from the "whole" implies a breakup of the relations permeating – in a chronological order – different separate processes. This separation is particularly evident in the preparation of financial statements: the values relating to a single accounting period – detached from the complete dynamics of the business management – require the interruption of a *continuum* and the analysis – for informative purposes – of a part of the whole (Broglia, 2005). Such analysis must therefore take as an object a series of accounting periods, rather than a *continuum* without interruption, with all the unintended consequences thereof. This implies that the financial statements must reflect such separation; they must in fact heavily rely on abstractions, as they are the only available means to translate into quantitative measures the processes ongoing at the end of the accounting period. However, the value of such processes is affected by the fact that the above mentioned separation is fictitious (Ohlson & Zhang, 1998; Verrecchia, 1998; Dechow & Dichev, 2002; Scott, 2003).

With reference to the dimension of *space*, the need for abstraction is, once again, made necessary by the unitary character of management activities, joined together by various relations into a whole. Such relations can have a different nature – commonality, conjunction, etc. – and their intensity entails a more or less profound modification of the situation reflected in the financial statements. As a matter of fact, the unitary character mentioned above requires a subjective allocation of values between different items to be measured in the financial statements; in this regard, it is worth mentioning, for instance, the calculation of the cost of inventories and the subjective assignment of a common cost. As a consequence, once again, the balance sheet must rely, for calculation purposes, on a process of abstraction, allowing the evaluation of each single process.

In essence, the above mentioned abstractions, whether they are based on the interruption of the relations linking the processes together in a *chronological succession*, or the breakup of the relations linking the processes together in a *simultaneous order* (Amaduzzi, 1992), cause financial statements to be subject to a certain degree of indefiniteness. Such indefiniteness translates into a logical impossibility to attribute one value only when measuring the quantitative aspects of a phenomenon, due to the above mentioned space-time relations.

This indefiniteness is pivotal to the issue of subjectivity in financial statements: the abstractions necessary for the assessment of accounting figures give space to the above indefiniteness and therefore to the subjective assessments of the preparers of the financial statements.

b) At the same time, forecasts are necessary because accounting measurement, although carried out at the end of the accounting period, must adopt a perspective view in order to investigate the future dynamics of the company and the business environment (it is worth mentioning, in this regard, the forecasts relating to due and payable credits and the need to perform an impairment test). This happens because the value assigned to the ongoing processes translates the need to anticipate future events, which directly or indirectly affect the business and the related processes of assessment.

b1) Any analysis aimed at forecasting future events is anything but easy, as companies are complex, dynamic and unpredictable systems. As a consequence, forecasts are characterized by uncertainty as to the probability future events might actually occur; as a matter of fact, uncertainty is an inevitable component of any process of assessment concerning future events, and therefore subject to previsions (Cattaneo, 1959).

b2) This means that uncertainty, too, is at the root of the issue of subjectivity in financial statements: once again, forecasts give space to the discretionary power of the preparer of financial statements, giving rise to the problem of evaluating the degree of subjectivity of the values anticipating – in a perspective view – the dynamics relating to the company and the business environment.

a) and *b)* The inherent indefiniteness and uncertainty of financial statements also generate a certain degree of subjectivity in *earnings management policies*. This topic is wide and complex and is beyond the scope of the present study. In this context, it will suffice to say that earnings management practices are discretionary because of the managerial discretion in preparing the financial statements (Note 4).

Last, it is worth noting that, based on the above, the degree of subjectivity of the figures in the financial statement does not reflect its degree of reliability. As a matter of fact, subjectivity originates from the above mentioned factors (indefiniteness and uncertainty) paving the way for the discretionary judgment of the preparers of financial statements; on the other hand, reliability is the consistency between a fact and its representation, whereas the representation aims at reproducing a fact for informative purposes. For the present purposes, a “fact” is the dynamics concerning the business management, while its representation is the financial statement which aims at providing a snapshot of such dynamics in the view of satisfying the above mentioned informative purposes. In other words, reliability is an expression of the relationship between an “economic entity” and an “accounting entity” (Amaduzzi, 1962). The *degree of reliability* is therefore an expression of the *degree of consistency* between the above mentioned elements of comparison: the dynamics concerning the business management and the figures in the financial statements. Such degree of consistency might well be the by-product of factors which are not necessarily related to the subjectivity of figures. In this regard, it will suffice to mention the borderline case of financial statements reporting a material mistake as to the balance of a bank account: the financial statements are not reliable, but the modified figure does not carry any subjective connotation; on the contrary, it is worth mentioning the different case of the measurement of the accounting value of inventories: if the assessment is carried out pursuant to the appropriate accounting principles, the financial statements will be reliable even though the assessment itself is affected by a high level of subjectivity. Still, it is safe to assume that the greater the degree of subjectivity of the figures – depending on the relevance of the assessments – the higher the risk of unreliable results. However, it is not true that a higher degree of subjectivity automatically leads to a lesser degree of reliability.

2.2 IFRS adoption in Italy

In 2002, a radical change in the regulation took place. This happened when the European Parliament and Council issued the Regulation (EC) No. 1606/2002, according to which companies listed on any financial market within the EU were required, starting in 2005, to refer to IFRS as accounting standards of reference for the preparation of their annual consolidated financial statement. (Note 5) Moreover, the same Regulation granted member states the power to permit or require other companies "to prepare their consolidated accounts and/or their annual accounts in compliance with the international accounting standards." (Note 6)

Through the enactment of Legislative Decree No. 38/2005, Italy made an extensive use of the power granted by the EU and required that companies with financial instruments that appear among the general public in large numbers, banks, insurance companies, and other financial entities subject to the supervision of the Bank of Italy prepare their consolidated accounts (as of 2005) and individual accounts (as of 2006) in compliance with IFRS. Moreover, as of 2006, all listed companies and listed insurance companies that do not prepare consolidated accounts have been required to adopt IFRS for their individual accounts. Finally, with only few exceptions, since 2005 all non-listed companies have been entitled to adopt IFRS to prepare their consolidated accounts. Companies included in the consolidation area of those companies that prepare their consolidated financial statements in compliance with IFRS are also entitled to prepare their individual accounts according to IFRS.

Therefore, until 2004, all Italian limited companies – but the same is true also for all other European countries – were required to prepare their individual and consolidated financial statements according to the national regulation that followed the IV and VII European Directive, respectively on individual and consolidated accounts, while starting from 2005 we have assisted to a composite situation, with companies which comply with IFRS and companies which continue applying Italian regulation and GAAP.

Immediately after the EU provision, the accounting literature started exploring pros and cons of IFRS adoption, especially from the investors' perspective. In this regard, Ball (2006, p. 9) underlined that, compared to the accounting standards that have historically typified Continental Europe, IFRS are designed to: *a)* reflect economic substance more than legal form; *b)* reflect economic gains and losses more timely; *c)* make earnings more informative; *d)* provide a more useful balance sheet; *e)* curtail the historical Continental European discretionary power of managers to manipulate earnings. Ball (2006, pp. 11-12) illustrated a numbers of potential direct and indirect benefits for investors coming from IFRS adoption, such as:

— the promise of more accurate, comprehensive and timely financial statement information, with reference to the national standards IFRS replace. To the extent that financial information is mainly driven by financial statements, this should allow more informed valuations in the equity markets, lower risk to both small and professional investors and lower firms' costs of equity capital;

— the promise of more comparable financial statements all around the EU, with a reduction of the cost investors shall bear to process financial information and an increase in the efficiency with which stock markets incorporate such information in prices;

— the removal of some barriers to cross-border acquisitions and divestitures, which in theory will reward investors with increased takeover premiums;

— the improvement of transparency and usefulness of financial statements information in contracting between firms and, respectively, lenders and managers.

On the other hand, the literature underlines that an extensive use of "mark to market" accounting, based on fair values (Note 7), will probably increase the volatility of reported income, as well as the gap between income and cash flows (Gwilliam & Jackson, 2008, p. 252). Moreover, historical cost valuations are seen as reliable but may be considered as not relevant, while market valuations may be seen as more relevant but less reliable, especially when markets are not liquid enough and fair value accounting becomes "mark to model" accounting (Ball, 2006, pp. 12-13; Gwilliam & Jackson, 2008, p. 243).

For our purposes, it is necessary to underline that, although both the Italian accounting regulation and IFRS intend to provide a true and fair view of companies' and groups' assets and liabilities, financial status, and economic performance, they developed in contexts influenced by different environmental and cultural factors. Therefore, they promote different classification criteria and, above all, different evaluation criteria, in that leading to what the international accounting literature refers to as "accounting relativism", and more specifically to an antagonistic form of accounting relativism (Corbella & Florio, 2010, p. 184). For example, compared to national regulation and GAAP, IFRS provide for an extensive use of fair value as an evaluation criterion alternative to the historical cost, introduce the distinction between intangible assets with definite and indefinite useful life, provide for the impairment test, require that financial leases are accounted for according to a financial approach, require the recognition of share-based payments in the income statement, and provide for actuarial calculation methods for employee benefits.

Such differences, some of which will be described in detail below, are so notable that the adoption of IFRS in Italy has been considered an event of the maximum importance and, at the same time, full of contradictions: indeed, on the one hand, a significant earnings quality improvement was expected, in light of the purpose for which the IASB itself was established (i.e., the approval of high quality, understandable, enforceable and globally accepted accounting standards); on the other hand, due to the big novelty in the accounting practices, firms were expected to take advantage of such event and implement earnings manipulations, to the detriment of earnings quality. Therefore, a number of studies focused on technical aspects related to the IFRS adoption (i.a., Andrei, Marchini, & Tibiletti, 2005; Corbella, Florio, Lionzo & Tessitore, 2007; Corbella & Florio, 2010), on the different informative content of financial statements (i.a., Paglietti, 2009; Capkun, Cavazan-Jeny, Jeanjean & Weiss, 2010; Mauro & Catuogno, 2010; Pieri, 2010; Veneziani, Carini, Bendotti & Teodori, 2010) and on the competing issues mentioned above (i.a., Mattei, 2006; Quagli, Avallone & Ramassa, 2007; Aussenegg, Inwink & Schneider, 2008; Cai, Rahman, & Courtenay, 2008; Capkun et al., 2008; Paglietti, 2009; Callao & Jarne, 2010). Our study aims at contributing to the literature on IFRS adoption in Italy shedding light on the *actual impacts* of the transition to IFRS on financial statements, on the *relevance of such impacts* on main accounting figures, and on the *different degree of subjectivity* arising from the adoption of those evaluation criteria which had great impacts on the financial statements presented by Italian companies.

3. Sample and research design

In order to develop our empirical analysis, we focused on a sample of Italian companies listed on the Milan Stock Exchange (hereinafter referred to as "MTA"). In particular, we selected non-financial companies listed on the MTA, which is the main Italian market.

The sample analyzed includes 152 listed companies operating in the industrial, commercial and service sector which were listed at the time the analysis was started (i.e., August 1st, 2006). Therefore, the sample does not include insurance companies, banks or financial corporations.

For most companies, the analysis took into consideration the financial statements relating to the fiscal year 2005. However, with reference to those companies which adopted IFRS after 2005, the analysis focused on the financial statements or mid-year financial statements relating to following accounting periods.

In order to carry out our analysis, we referred to the reconciliation schemes presented by listed companies for the purposes of the IFRS First-Time Adoption in accordance with IFRS 1.

In particular, the data was drawn from:

- reconciliation schemes providing a reconciliation between (1) consolidated equity based on "old" accounting principles and (2) consolidated equity based on IFRS on the closing day of the last accounting period in which "old" accounting principles were applied (generally December 31st, 2004);
- reconciliation schemes providing a reconciliation between (1) consolidated net income based on "old" accounting principles and (2) consolidated net income based on IFRS; once again, the analysis focused on the closing day of the last accounting period in which "old" accounting principles were applied (generally December 31st, 2004).

The empirical analysis involved the following stages:

1. analysis of the reconciliation schemes prepared by the companies listed on the MTA for the purposes of First-Time Adoption of IFRS;
2. identification of the kind of adjustments required by the above transition with reference to financial statements, hence moving on to considering the operating income, as well as the net assets value;
3. collection and analysis of data relating to the relevance of the above adjustments to the operating income and the net assets value, in order to verify the sign and gauge the impact of such adjustments.

4. The impact of IFRS transition on the financial statements presented by Italian companies

The first contribution to the literature on the IFRS adoption offered by our study consists in the identification of the evaluation criteria provided for by IFRS which actually impacted on the financial statements presented by Italian companies, determining an adjustment of the carrying amount of specific assets, liabilities, revenues and/or expenses in the year of transition to IFRS. In particular, our analysis differs from other analyzes in the accounting literature which consist in a theoretic description of such adjustments, carried out *a priori*, merely comparing the Italian GAAP and the IFRS (Quagli et al., 2010); on the contrary, our analysis aims to examine directly the reconciliation schemes presented by listed companies for the purpose of the IFRS First-Time Adoption in accordance with IFRS 1 and takes note of the adjustments actually required. In other words, we leave aside any theoretical comparison and focus only on the actual impacts thereof.

The analysis highlights that the accounting treatments required by IFRS having an impact on the financial statements presented by Italian companies are the following:

— Revenues (recognition): *the amendments are made necessary by IAS 18 and, especially, by a stricter application of the principle of accrual basis accounting, as well as the treatment of revenues and interest originating from a deferred payment as separate accounting figures.*

— Impairment of assets (amortization): *the amendments are made necessary by the application of IAS 36 and specifically by the impairment losses recognized in the balance sheet based on the impairment test.*

— Share-based payments (workforce cost): *the amendments are made necessary by the application of IFRS 2 and specifically by the fair value of the financial instruments granted to the employees recognized in the balance sheet.*

— Income tax: *the amendments are made necessary by the application of IAS 12 and specifically by the net amount of deferred tax liabilities, whenever the future recovery (settlement) is allowed.*

— Intangible assets (capitalized costs): *the amendments are made necessary by the application of IAS 38 and specifically by the write-off of some capitalized costs (such as plant, development or marketing costs) from the balance sheet, as well as the cancellation of the relative amortizations from the profit and loss account.*

— Intangible assets (start-up costs): *the amendments are made necessary by the application of IAS 38 and specifically by the write-off of amortized start-up costs from the financial statement.*

— Tangible assets (leases): *the amendments are made necessary by the application of IAS 17 and specifically by the accounting treatment required for finance leases.*

— Tangible assets (other assets): *the amendments are made necessary by the application of IAS 16 and specifically by the following reasons: the separation of the value of land from the value of buildings; the different accounting treatment of dismantling and renovation costs, of grants related to assets, periodic maintenance costs, non-current assets available for sale; the restructuring of the plan for the depreciation of assets in order to (1) avoid the application of principles of fiscal derivation or (2) apply the so-called "component analysis"* (Note 8).

— Treasury shares: *the amendments are made necessary by the application of IAS 32 and specifically by the obligation to recognize the value of treasury shares in redetermining the net income.*

— Inventory: *the amendments are made necessary by the application of IAS 2 and specifically by the evaluation of leftover stock based on cost formulas other than LIFO.*

— Employee benefits: *the amendments are made necessary by the application of IAS 19 and specifically by the evaluation of the severance payment based on the actuarial calculation method governed by IAS 19.*

— Provisions for risks and charges (discounting or deletion): *the amendments are made necessary by the application of IAS 37 and specifically by the remeasurement of provisions to be paid over a period of time, as well as the cancellation of the provisions which do not comply with the requirements set by IAS 37 for their recognition.*

— Financial liabilities (bonds): *the amendments are made necessary by the application of IAS 39 and specifically by the revaluation of bonds based on the amortized cost method.*

— Financial liabilities (others): *the amendments are made necessary by the application of IAS 39 and specifically by the evaluation of debts based on the amortized cost method.*

— Financial instruments: *the amendments are made necessary by the application of IAS 39 and specifically by the obligation to use fair value for the recognition of derivatives in the financial statements.*

— Participations (concept of control): *the amendments are made necessary by the application of IAS 27 and specifically by the application of the criteria for the evaluation of shares, mainly because of the new definitions of subsidiary and affiliated company*.

— Participations (consolidation area): *the amendments are made necessary by the application of IAS 27 and IFRS 3 and specifically by the redefinition of the area of consolidation.*

— Tax effects on the above adjustments: *the amendments are made necessary by the application of IAS 12 and specifically by the recognition of the fiscal effects deriving from the above adjustments to the financial statements.*

— Miscellaneous adjustments: *this group includes any and all amendments which do not fall within any of the above cases*.

Based on the above, it is safe to assume that the changes to the evaluation criteria that actually affected listed Italian companies in the transition to IFRS were numerous; such changes also had a significant impact and concerned a wide range of items in the financial statements. All this with respect to the *qualitative* aspect; as to the *quantitative* aspect, the effects of such changes are outlined in the paragraph below.

5. Effects of IFRS transition

The second contribution our study offers to the literature on the IFRS adoption is the appreciation of the relevance of the impacts on the main accounting figures identified in the previous Section, namely net income and equity. In particular, this paragraph focuses on (1) how often each adjustment recurred; (2) whether it determined an increase or decrease in accounting figures and (3) the relevance of the effects produced on operating income and net assets.

The results of such analysis have been reported in the tables below. For the purpose of understanding the content of the tables, it is worth pointing out what follows:

— "adjustment" means the increase or decrease in the accounting figures required by the transition to IFRS and hence the impact of the relevant adjustment on net income and/or net assets;

— the sign "(+)" means an increase determined by the adjustment to net income and/or net assets (for example due to the deduction of a cost or development of a business activity), whereas the sign "(-)" means an opposite effect;

— adjustments are expressed as a percentage in order to compare the data collected in relation to each company. Such data are then synthesized in the means;

— the "frequency" means, in percentage, the number of companies affected by the relevant adjustment compared to the total number of companies included in the sample.

Table 1 deals with a descriptive analysis of each adjustment to net income expressed as a percentage of the operating revenues.

Table 1. Adjustments to net income

	Mean	Std deviation	Frequency
Revenues (recognition)	-0.06%	0.67%	19.74%
Impairment test (amortization)	-0.04%	1.21%	16.45%
Share-based payments (workforce cost)	-0.22%	2.22%	22.37%
Income tax	-0.08%	0.39%	15.79%
Intangible assets (capitalized costs)	1.09%	3.28%	87.50%
Intangible assets (start-up costs)	0.91%	4.80%	54.61%
Tangible assets (leases)	0.02%	0.17%	26.97%
Tangible assets (other assets)	-0.11%	0.69%	57.24%
Treasury shares	0.02%	0.40%	13.82%
Inventory	0.03%	0.34%	28.29%
Employee benefits	0.00%	0.00%	86.18%
Provisions for risks and charges (discounting or deletion)	0.13%	1.96%	38.82%
Financial liabilities (bonds)	0.00%	0.02%	1.32%
Financial liabilities (others)	-0.04%	0.29%	17.11%
Financial instruments	2.04%	26.02%	29.61%
Participations (concept of control)	-24.89%	217.50%	26.32%
Participations (consolidation area)	-2.96%	38.21%	15.79%
Tax effects on the above adjustments	-0.71%	6.37%	71.05%
Miscellaneous adjustments	0.00%	0.53%	42.76%

On average, the group of adjustments that produced the most relevant quantitative effects on net income concerns participations, which required a redefinition of the concept of control and the consolidation area. This type of adjustment originated an average decrease in net income equal to, respectively, 24.89% and 2.96%. It also proved to be the most volatile group of adjustments. However, it is worth noting that the above adjustment to the consolidation area does not involve directly an *actual* change in the evaluation criteria; it actually depends on the fact that the consolidation area expands/narrows, given that consolidated financial statements are "second degree" financial statements. As a consequence, the adjustments related to participations are excluded from the following analysis. Hence, for our purposes it is necessary to stress the relevance of the effects produced by the fair value valuation of financial instruments, which determined an increase in net income equal to 2.04% on average.

On the contrary, the groups of adjustments that did not produced any relevant quantitative effect on net income concern financial liabilities, which required a revaluation of *bonds* based on the *amortized cost method*, and *employee benefits*.

Table 2 deals with a descriptive analysis of the adjustments to equity expressed as a percentage of total assets.

Table 2. Adjustments to equity

	Mean	Std deviation	Frequency
Revenues (recognition)	-0.19%	1.43%	19.74%
Impairment test (impairment loss)	-0.10%	0.84%	19.08%
Share-based payments (workforce cost)	-0.02%	0.13%	4.61%
Income tax	0.01%	0.95%	17.11%
Intangible assets (capitalized costs)	-0.92%	7.59%	90.13%
Intangible assets (start-up costs)	0.68%	1.58%	54.61%
Tangible assets (leases)	0.12%	0.43%	26.32%
Tangible assets (other assets)	1.69%	5.25%	63.82%
Treasury shares	-0.27%	0.86%	27.63%
Inventory	0.13%	0.91%	23.03%
Employee benefits	-0.31%	3.94%	91.45%
Provisions for risks and charges (discounting or deletion)	0.38%	2.48%	37.50%
Financial liabilities (bonds)	0.00%	0.02%	1.32%
Financial liabilities (others)	0.02%	0.81%	19.74%
Financial instruments	0.05%	0.76%	34.87%
Participations (concept of control)	0.00%	2.36%	29.61%
Participations (consolidation area)	-0.39%	3.88%	19.08%
Tax effects on the above adjustments	-0.43%	3.23%	71.71%
Miscellaneous adjustments	-0.09%	0.58%	42.76%

The group of adjustments that produced the most relevant quantitative effects concerns *tangible assets* (on average +1.69%). Such group of adjustments required: the separation of the value of land from the value of buildings; the different accounting treatment of dismantling and renovation costs, grants related to assets, periodical maintenance costs and non current assets held for sale; the restructuring of the plan for the amortization of assets in order to (1) avoid the application of principles of fiscal derivation or (2) apply the so-called "component analysis".

Once again, the group of adjustments that did not produce any relevant quantitative effects on net capital concerns *financial liabilities*, which required the revaluation of bonds based on the amortized cost method.

In light of both Tables 1 and 2, the group of adjustments that produced the most frequent effects on net income concerns *intangible assets*, which required the elimination of some capitalized costs from the balance sheet (required in 87.50% of cases), while the group of adjustments that produced the most frequent effects on equity is the evaluation of *severance payments* (required in 91.45% of cases) based on IAS 19 (*Employee Benefits*), immediately followed – again – by *intangible assets* (required in 90.13% of cases).

The adjustments concerning *financial liabilities* are the least significant both from a qualitative point of view (considering the effects on net income and net equity) and in terms of frequency.

A further analysis carried out revealed that no group of adjustments produced only positive or negative effects in any one company; on the contrary, each type of adjustment produced positive effects in some companies and negative effects in other companies.

In order to study in depth the effects required by each type of adjustments, we identified the companies in which they produced positive effects and the companies in which they produced negative effects. We carried out a descriptive analysis calculating the mean and the frequency of the merely positive or merely negative effects. Such analysis allows describing more effectively the impact, as it avoids any compensating effects that would otherwise be included in the means.

Table 3 deals with the mean and frequency of positive and negative impact on operating revenues of each type of adjustments.

Table 3. Positive and negative impacts for each adjustment on net income

	Positive impacts		Negative impacts	
	Mean	Frequency	Mean	Frequency
Revenues (recognition)	0.37%	7.89%	-0.73%	11.84%
Impairment test (amortization)	0.98%	11.18%	-2.88%	5.26%
Share-based payments (workforce cost)	0.10%	1.32%	-1.07%	21.05%
Income tax	0.18%	5.26%	-0.82%	10.53%
Intangible assets (capitalized costs)	1.62%	73.03%	-0.65%	14.47%
Intangible assets (start-up costs)	2.38%	51.32%	-9.43%	3.29%
Tangible assets (leases)	0.22%	17.76%	-0.17%	9.21%
Tangible assets (other assets)	0.22%	29.61%	-0.63%	27.63%
Treasury shares	1.36%	3.29%	-0.19%	10.53%
Inventory	0.47%	13.82%	-0.23%	14.47%
Employee benefits	0.13%	46.71%	-0.17%	39.47%
Provisions for risks and charges (discounting or deletion)	1.42%	14.47%	-0.31%	24.34%
Financial liabilities (bonds)	-	0.00%	-0.14%	1.32%
Financial liabilities (others)	0.10%	4.61%	-0.35%	12.50%
Financial instruments	15.53%	13.82%	-0.66%	15.79%
Participations (concept of control)	0.83%	12.50%	-180.94%	13.82%
Participations (consolidation area)	2.19%	6.58%	-33.65%	9.21%
Tax effects on the above adjustments	0.54%	24.34%	-1.80%	46.71%
Miscellaneous adjustments	0.31%	25.00%	-0.45%	17.76%

Table 3 shows that the group of adjustments that required the quantitatively most relevant positive impacts on net income concerns *financial instruments* valued at fair value (+15.53%), while the group that produced the most frequent positive impact were the two concerning *intangible assets*, which required, respectively, the elimination from the balance sheet of some capitalized costs (plant, development, advertizing costs, etc.), as well as the elimination from the profit and loss account of the relative amortizations (recurring in 73.03% of the companies), and the elimination from the balance sheet of the start-up costs (recurring in 51.32% of cases).

The group of adjustments that required the quantitatively most relevant negative effects on net income concerns the *participations* (180.94% and 33.65%), excluded from the analysis for the reasons previously mentioned, while in most cases the negative effects on net income are due, in addition to fiscal effects of other adjustments, to the adjustment relating to *severance payments* (recurring in 39.47% of the companies).

Table 4 shows the mean and the frequency of positive and negative impacts on equity for each type of adjustment.

Table 4. Positive and negative impacts for each adjustment on equity

	Positive impacts		Negative impacts	
	Mean	Frequency	Mean	Frequency
Revenues (recognition)	0.61%	6.58%	-1.73%	13.16%
Impairment test (amortization)	1.13%	5.26%	-1.17%	13.82%
Share-based payments (workforce cost)	0.03%	1.32%	-0.54%	3.29%
Income tax	0.93%	10.53%	-1.41%	6.58%
Intangible assets (capitalized costs)	1.94%	22.37%	-2.01%	67.76%
Intangible assets (start-up costs)	1.36%	50.66%	-0.24%	3.95%
Tangible assets (leases)	0.63%	20.39%	-0.18%	5.92%
Tangible assets (other assets)	3.24%	54.61%	-0.86%	9.21%
Treasury shares	-	0.00%	-0.98%	27.63%
Inventory	0.84%	18.42%	-0.51%	4.61%
Employee benefits	0.27%	51.32%	-1.11%	40.13%
Provisions for risks and charges (discounting or deletion)	1.32%	30.26%	-0.28%	7.24%
Financial liabilities (bonds)	0.11%	1.32%	-	0.00%
Financial liabilities (others)	1.08%	6.58%	-0.36%	13.16%
Financial instruments	0.83%	15.79%	-0.40%	19.08%
Participations (concept of control)	2.03%	13.16%	-1.60%	16.45%
Participations (consolidation area)	0.15%	9.21%	-4.06%	9.87%
Tax effects on the above adjustments	1.29%	28.95%	-1.89%	42.76%
Miscellaneous adjustments	0.24%	19.08%	-0.55%	23.68%

The data show that the quantitatively most relevant positive impact on equity is due to the adjustments to tangible assets (+3.24%). Such group is also producing the most frequent positive effects (54.61%).

On the other hand, the group of adjustments that produced the most relevant negative impact on equity concerns the re-determination of the *consolidation area* (-4.06%), while the group of adjustments that most frequently produced negative effects concerns *intangible assets* (67.76%), which involved reporting some deferred charges in the profit and loss account.

Each type of adjustment reported in the tables can produce specific effects on the degree of subjectivity of accounting figures – increasing or decreasing the relevance of undetermined/uncertain values – and therefore on the risk of reporting less reliable values in the financial statements. Having said that, we identified the *most significant* adjustments in order to be able to appreciate (in the following paragraph) the effect on the subjectivity of accounting figures. In particular, the relevance of the adjustments is evaluated based on the following criteria:

1. the *quantitative relevance of the mean of compensated effects* (calculating offsetting positive and negative effects) produced by the adjustment to consolidated net income or equity of the companies included in the sample;

2. the *quantitative relevance of the mean of non-compensated effects* (calculated keeping positive and negative effects separate) produced by the adjustment to consolidated net income or equity of the companies included in the sample;

3. the *degree of frequency* of the adjustment (in terms of frequency) in the financial statements examined;

4. the *degree of novelty* determined by the change in the evaluation criteria compared to the existing Italian GAAP (Note 9).

By applying the above criteria, the adjustments identified as the most relevant – and therefore worth being analyzed in the following paragraph – are:

a) fair value measurement of *financial instruments* and *participations* (selected because of the quantitative relevance of the mean of compensated effects, tables 1 and 2);

b) evaluation of *intangible assets*, with reference to the different treatment of capitalized costs and start-up cost (selected because of the quantitative relevance of the value of non-compensated effects, table 3 and 4) (Note 10);

c) calculation of *severance payments* based on the actuarial calculation method (selected based on the degree of diffusion, tables 1 and 2) (Note 11);

d) reporting of *share-based payments* in the profit and loss account (selected based on the degree of novelty).

6. Italian GAAP versus IFRS in light of subjectivity

As stated before, the third contribution our study aims to offer to the literature on the IFRS adoption in the EU is to shed light on the different degree of subjectivity, a characteristic qualifying any financial statement that in our opinion was dramatically affected by the IFRS adoption.

In order to achieve such purpose, in this paragraph we explore some differences existing between, on the one hand, Italian accounting rules and GAAP and, on the other hand, IFRS. Our attention focuses on such differences which, based on our empirical analysis, were found to considerably impact on the financial statements presented by Italian companies. In particular, we focus on the evaluation criteria for the following assets and liabilities (see above, at the end of the previous paragraph):

1. financial instruments and participations;
2. intangible assets;
3. severance payments;
4. share-based payments.

Of course, our comparison is not expected to describe exhaustively the differences in subjectivity between Italian GAAP and IFRS, but is at least expected to give an idea of the so called "accounting revolution" with specific reference to the issue of subjectivity.

6.1 Financial instruments and participations

The changes in the criteria at issue consists in the recognition at fair value of financial instruments which, based on Italian accounting principles, were valued at cost or were not even recorded in the financial statements (derivative instruments). As a consequence, the above change is connected to the (broader) issue of the alternative between fair value/cost valuation and related effects in terms of degree of subjectivity.

As is well known, the main advantage of using the fair value is that it represents a market-based measurement which contemplates a hypothetical transaction between market participants at the measurement date and therefore "captures the essence" of the company's performance in its dynamic process of change, assuring the reliability of its accounting representation. In fact, performance evolves continuously, along with the process of business management, and financial information based on fair value can assure the consistency between the characteristics of the process of business management – which unfolds without interruption – and its accounting representation. In fact, only this approach (which rules out the adoption of historical investment values) can effectively represent the results already achieved and draw the attention to the expected results of ongoing operations by making reference to fair values, whether in-use or in-exchange.

Based on the above, it might seem advisable the adoption of an accounting system (Note 12) based on *full fair value*. Yet, such a conclusion is not entirely accurate, as it does not take into consideration the disadvantages of a fair value system; for the present purposes, it is worth mentioning, for instance, the one related to the degree of subjectivity deriving from the adoption of a full fair value system. Indeed, this system would be characterized by a high degree of subjectivity, as it would be based on the possibility to choose, at the end of the reporting period, between an indefinite number of values relating to the expected outcome of ongoing operations.

Further developing the above considerations, it is worth noting that, based on the new wording of IFRS 13 (*Fair Value Measurement)*, the assessment of fair value requires choosing between different approaches (market approach, cost approach, income approach) using directly or indirectly observable data (values on active markets, observable inputs or non observable inputs) allowing a degree of subjectivity that is higher than that allowed under the old Italian provisions: the assessment of an asset or liability based on the "objective" value determined by the cash flow variation.

6.2 Intangible assets

As far as intangible assets are concerned, changes in the above evaluation criteria concern two separate issues: *a)* capitalized costs and *b)* the amortization process.

a) As to capitalized costs, the Italian regulation provides for the capitalization – although under restrictive conditions – of start-up costs, costs for advertisement and research and development expenditure, while IAS 38 (*Intangible Assets*) allows the capitalization of development expenditure only.

Operationally – in the year of transition to IFRS – start-up costs, advertisement costs and most of research and developments costs previously recognized by Italian companies were deleted from the balance sheet, and their annual amortization was eliminated from the income statement. Besides, the amortization of goodwill – and eventually of other intangible assets with indefinite useful life – was eliminated from both the balance sheet and the income statement, and eventually replaced by an impairment loss.

In terms of subjectivity in financial statements, we can identify a number of impacts. First of all, the elimination of capitalized costs reduces the relevance of subjective values in financial statements, due to the fact that a) the assumptions related to the capitalization of possible indirect costs, b) the estimates related to the recoverable value of assets reported in the balance sheet, as well as c) the assumptions required by the calculation for the amortization of capitalized costs are no longer applicable. Therefore, the transition to IFRS seems to reduce the relevance of income and assets whose value is determined on a subjective basis.

b) On the one hand, the issue relating to the elimination of amortized start-up costs is more complex. Under the Italian Civil Code, once capitalized, all intangible assets must be amortized during their useful life, or at some time over a period of a certain number of years defined by law, and tested for long-lasting value reductions. Differently, IAS 38 distinguishes between intangible assets with a definite useful life, which shall be amortized and tested for impairment according to IAS 36 (*Impairment of Assets*) whenever there is an indication that the intangible asset itself may be impaired, and intangible assets with indefinite useful life, which should not be amortized but tested for impairment annually, even though there is no indicator of impairment.

On first approximation, the novelty introduced by IFRS allows avoiding the use of abstraction in the calculation for the amortization of assets, thus decreasing the relevance of subjective values in the profit and loss account and the degree of subjectivity of the financial information. However, upon further analysis, the introduction of the impairment test, which must be carried out in relation to start-up costs annually, generates a few significant considerations as to the degree of subjectivity.

In this regard, the impairment loss to be recorded in the profit and loss account is determined in compliance with the following parameters: the carrying amount, the value in use and the fair value. This is the same as saying, for the purposes hereof, that the possible write-down is affected by the level of approximation and abstraction of the above values. Therefore, it is worth analyzing briefly how the carrying amount, the value in use and the fair value are determined, in order to be able to study the correlation between such values and the relative degree of subjectivity.

The carrying amount may appear like an objective amount. This is in fact not true. Sometimes, the impairment test does not concern a single asset, but a Cash Generating Unit (CGU) or a group of CGUs. In such a case, the determination of the carrying amount pursuant to IAS 36 involves several “choices”, including – but not limited to – *i)* the identification of the assets which must be included in the accounting value of the CGU; *ii)* the allocation to the CGU of only those assets that can be directly attributed to it; *iii)* the accounting treatment of corporate assets which must also be tested for impairment; *iv)* the role of start-up costs in the assessment of the value of CGUs. It is safe to assume that the above choices are characterized by a high degree of indefiniteness, mostly due to the fact that they involve the application of criteria not directly related to the amount to be assessed. In this regard, IAS 36 only makes reference to «reasonable and uniform criteria», which certainly does not restrict the range of alternative valuation methods available. The criteria (a) may be economic/financial *or* physical/related to the production, (b) may allocate costs using a single allocation base *or* different allocation bases, (c) may involve one or more stages, and so on. This means that such criteria can significantly modify the allocation of indirect assets, affecting the assessment of the value and thus the test results.

On the other hand, the value in use is an expression of the company's expectations as to the cash inflows that can be generated by the CGU; such cash inflows are estimated by the management on the basis of information not always known to the market. The assessment of the value in use pursuant to IAS 36 requires the assessment of the following:

a) the cash flows that the single CGU or the group of CGUs can generate;

b) the expectations as to the possible changes in the amount and/or timing of such cash flows;

c) the time value of money;

d) the degree of uncertainty inherent in the cash flows;

e) other factors that the market participants would take into consideration when transacting for that asset/liability and would therefore affect the expected cash flows.

All the above variables involve relevant degrees of subjectivity related to: *i)* the discretionary technical choices required by the assessment of the value in use: (a) real *or* nominal, (b) gross *or* net of tax flows and rates, with all the related risks, etc; *ii)* the uncertainty inherent in the forecasts required by the carrying out of the test: growth rate of production and sale figures, trends of unit prices, relevance of operating costs, expected inflation rates, etc. In addition to the above, there is the indeterminacy constitutional to the process of identification of the “boundaries” of the CGU. Therefore, the concern that an excessive degree of discretion in the assessment of the value in use might divest the impairment test of its significance appears to be well-grounded, also in consideration of the empirical evidence supporting it.

The calculation of the fair value less costs to sell is characterized by the same uncertainty. It is in fact a “probable” price that expresses the conditions of an arm's length transaction between knowledgeable, willing parties, and aims to synthesize the expectations as to the outcome of an ongoing transaction involving an investor having ordinary competence and knowledge. IAS 36 provides some reference for the calculation of the fair value:

a) the price agreed in a binding sale agreement;

b) the market price for an offer in an “active market” or, if the latter is not available, the negotiated price, still in an “active” market, in the most recent transaction;

c) the value calculated based on the best valuation techniques available, also taking into consideration the most recent comparable transactions.

Evidence of the above is the fact that the possibility of using the objective price agreed in a binding agreement is quite rare. Subjective evaluations are inevitable to the extent it is necessary to make reference to quoted prices in an “active” market; with reference to stocks, for example, it will suffice to think about the choice related to the time period to be taken into consideration in establishing the market value (current, one-month, six-month, etc.) or the calculations required to deal with the well-known issues concerning majority premiums, often incorporated in the tested stocks and, conversely, not included in transaction prices relating to minority stakes. If we then consider the third criterion referred to above – valuation methods, such as the “Multiples” method or the “Comparable Transactions” method – the degree of subjectivity and the level of uncertainty increase even more, to the extent IAS 36 does not specify the valuation criteria to adopt, leaving the choice to the preparer of financial statements.

In conclusion, IAS 36 introduced a high degree of subjectivity in the financial information because of the technical discretion deriving from the principle itself and the indefiniteness and uncertainty inherent in most of the calculations required by the provision. It is true that Italian GAAP require some adjustments aimed at checking the value of intangible assets. Nonetheless, the innovative features of IAS 36 can be attributed to the institutionalization, analytic regulation and frequency of application of the impairment test, which might induce less prudent preparers of financial statements to take advantage of the degree of subjectivity allowed and thus affect the reliability of the financial information. In the face of the consequences of such behaviors, the decrease in subjectivity in the amortization of start-up costs discussed above seems to lose importance.

6.3 Employee benefits

Based on the Italian accounting principles, severance payments (the *Trattamento Fine Rapporto*, hereinafter referred to as the “TFR”) originates: *i)* an “ascertained” liability that the most acknowledged business economists regard as an actual liability duly “liquidated”, whose existence and amount is not disputed; *ii)* an expense that gives rise to the above liability and whose amount is calculated based on the formula provided by law (Note 13).

Conversely, further to the transition to IFRS, the scenario changes completely based on the following:

- the calculation of TFR pursuant to Italian regulations is based on the principle that the liability calculated at the end of the financial year must reflect the right accrued by the employee at that point-in-time or be equal to the amount due at that point-in-time in case of termination of the employment relationship;
- such formulation is based on a premise that is not consistent with IFRS principles, because of the underlying “substantial” approach: as a matter of fact, the payment of the amount is not made at the end of each financial

year, but upon termination of the employment relationship;

- as a consequence, the liability, when calculated correctly, must take into account both *(i)* the time value of the period between the preparation of the financial information and the actual payment of the relevant amount, and *(ii)* all the events that might occur in such a period of time;
- based on such assumption, pursuant to IAS 19 (*Employee Benefits*), the TFR must be calculated based on an actuarial valuation method which is itself based on complex hypotheses potentially leading to significantly different results depending on the methods adopted and assumptions made.

Having said that, the main values IAS 19 requires an entity to recognize are: *i)* the present value of expected future contributions in exchange for service rendered by employees up to the point-in-time when the valuation is made (the so-called "actuarial liability"); *ii)* the present value of expected future contributions in exchange for service rendered by employees in the current reporting period (costs contribute to the formation of the business income in the period in which they are incurred); *iii)* interest accrued during the relevant reporting period (the so-called "interest cost"). The calculation of the above amounts involves a complex valuation process, based on actuarial assumptions about financial variables (interest rates; inflation trends; wages; etc.) and demographic variables (retirement, length of service, illness; resignation and mortality; frequency of advance payments of a portion of TFR and the average amount of such portions; frequency of pension fund subscriptions, etc.).

The high number of the variables referred to above, the period of time over which such variables unfold and, above all, the unpredictability of the implications they might have, makes any comment on the subject unnecessary for the present purposes: further to the entry into force of IAS 19, the actual amount of the TFR is the result of complex assumptions, characterized by a high degree of technical discretion and approximation, as well as the subjective evaluation of future dynamics, very often outside the scope of the specific economic situation under consideration.

Based on the above, it is safe to assume that the value to be recorded in the financial documents is highly affected by the choices made as to the assessment of the variables relevant to the calculation, thus increasing the level of discretion of the preparers of the financial documents in adopting earnings management policies, and affecting the reliability of accounting figures.

6.4 Share-based payments

With reference to share-based payments, it is necessary to underline that in Italy there are neither specific rules nor GAAP on this accounting issue. However, there is only one accounting treatment commonly used in practice by companies that prepare their financial statements according to Italian law and GAAP, which is our point of reference for the comparison with IFRS.

According to Corbella & Florio (2010, pp. 189-190), the Italian practice does not report any expense in the income statement, nor does it provide for any other accounting entry: it simply ignores the existence of a payment in kind or a benefit associated with the production factor consisting in work. Conversely, IFRS 2 (*Share-based Payments*) always requires, at the time the right is granted, the recognition of a cost in the income statement apportioned over the years leading up to the vesting date. The expense reported in the income statement is then offset by a corresponding increase in the net capital.

Operationally, in the year of transition to IFRS Italian companies were required to recognize in the income statement the cost of the stock options granted to employees, and the estimate of such cost represents the most important change in subjectivity arising from the application of IFRS 2. The formula for the calculation of the cost of stock options to be reported in the profit and loss account is:

*No. of fully vested or vesting equity instruments * the fair value at the date of grant* (1)

The first factor in the multiplication is the product of the number of equity instruments granted to a single beneficiary, while the second factor in the formula expresses the fair value of the equity instruments granted to the beneficiary of the plan, measured at grant date.

Both factors involve, once again, highly discretionary valuations. On the one hand, the number of vesting instruments involves an estimate as to the "probability of verification" of the conditions upon which those instruments were granted; such conditions being, typically, to complete a specified period of service and achieve specified performance targets to be met. On the other hand, the fair value requires an estimate based on particular models of pricing, provided that options are not listed or negotiable on stock exchanges. Last, the value obtained as a product of the factors referred to above must be expensed over the vesting period of the instrument.

Having said that, the assessment of the fair value of stock options requires, among others, the following measurements:

- the assessment of the current market value which, in case of non listed instruments or in the absence of market prices, requires adopting complex algorithm evaluation methods;
- the formulation of forecasts as to the expected life of the options, taking into consideration the probability that they might cease to exist before the maturity date;
- the appreciation of the expected volatility of share prices, taking into consideration past trends of price variation and applying quantitative finance algorithms;
- the formulation of estimates as to the actual situation of the entity, with reference to the expectations of future dividends over the vesting period;
- the decision on the discount rate to apply, in the view of identifying those instruments having a return rate that can express the transposition of values over a long period of time.

Based on the above analysis, the degree of subjectivity permeating the recognition and measurement process of stock options appears to be evident.

7. Conclusions

The introduction of IFRS in Europe represented an accounting revolution in terms of number of companies affected by it and innovative contents thereof, especially with reference to the evaluation criteria of assets and liabilities reported in the financial statements. As a consequence, the introduction of IFRS renewed the importance within the accounting literature of the issue of the degree of subjectivity in financial statements. This topic draws attention of both scholars and users of financial statements as it deals with the issue of discretionary powers of the preparers of such documents, greatly affecting earnings quality and disclosure of financial information. In particular, the higher the degree of subjectivity of accounting figures, the greater the risk of unreliable information depending upon the relevance of the estimates formulated.

This study contributes to the literature on the IFRS adoption exploring the issue of the subjectivity in financial statements in a specific context, which is Italy. More precisely, in its empirical sections, the study dealt with the identification of the changes to evaluation criteria – from Italian regulation and GAAP to IFRS – which actually impacted on the financial statements presented by Italian companies, and with the appreciation of the magnitude of such impacts, based on how often each adjustment recurs, whether it determines an increase or decrease in accounting figures and the relevance of its effects on the main accounting figures, namely net earnings and equity. Finally, in its theoretical section, the study explores and discusses the impacts on subjectivity of the most relevant adjustments identified.

Combining together the results of the empirical and theoretical analysis, the following conclusive remarks can be drawn. First, the analysis shows that, with reference to the degree of subjectivity in financial statements the application of IFRS involved a momentous change compared to the Italian regulation. In particular, the situation unarguably changed – to a significant extent – because of the following factor: IFRS, in addition to the changes in the purpose and object of financial information (which subjects are outside the scope of this study (Note 14)), generated relevant modifications in the evaluation techniques; in fact, there was a shift from evaluation criteria based on values negotiated at the upstream stage of production (cost incurred), towards evaluation criteria (also) based on the value of use and values negotiable at the downstream stage of production (fair values in use and fair values in exchange). Such change affects the degree of subjectivity of the choices to be made in the preparation of the financial information. In addition, the situation described above reveals the main principle that permeates IFRS: the fact that the informative purposes integral to financial documents fully justify the highest degree of subjectivity of the accounting representation. It is safe to assume that, pursuant to IASB, such characteristic is a constitutional trait of the evaluation process. In conclusion, IASB seems to espouse an underlying philosophy which, in the trade-off between reliability and relevance, adopts a more "courageous" interpretation than the Italian accounting tradition; a more "courageous" interpretation that seems to be fully consistent with the premises on which IFRS are built.

The last statement is true on a conceptual level. On a more practical level though, the analysis concerning the assessment of the effects produced on net income and equity by the above changes shows that, despite the increase in the degree of subjectivity, the actual impact on accounting values does not appear to be significant or, in any case, its importance (analyzed in terms of relevance, frequency and degree of novelty) is limited to some specific accounting items. This last consideration shows that the transition to IFRS is the cause of the detachment between the effects on subjectivity identifiable on an *abstract* level and effects on subjectivity identified on a *practical* level: with reference to non-financial listed Italian companies, the first ones appear to be more relevant than the latter.

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Notes

Note 1. Regulation (EC) No. 1606/2002 of July 19, 2002, on the Application of International Accounting Standards.

Note 2. For a brief description of the reasons behind the IFRS adoption in UE and the relative process, please refer to Jermakowicz & Gornik-Tomaszewski, 2006, pp. 43-47.

Note 3. In such regard, Parfet (2000, p. 482) underlined that in literature there are those who would prefer more comprehensive accounting standards in the form of "cookbook accounting" and those who believe that trying to write rules to cover every possible event is an exercise in futility and that the use of judgment and subjectivity in accounting is important and desirable.

Note 4. Indeed, the definition of earnings management itself relies on the concept of subjectivity. For example, Degeorge et al. (1999, p. 2) defined earnings management as "the strategic exercise of managerial discretion in influencing the earnings figure reported to external audiences […] accomplished principally by timing reported or actual economic events to shift income between periods".

Note 5. Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, Art. 4, *Consolidated accounts of publicly traded companies.*

Note 6. Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards, Art. 5, *Options in respect of annual accounts and of non publicly traded companies*.

Note 7. As regards fair value accounting, Power (2010, p. 197) explicitly stated that "the idea of fair value measurement for accounting came to be a motivating and quasi-philosophical principle at the center of an accounting reform process led in different ways by specific members of FASB and IASB. Fair value could be said to be much more than just a technical measurement convention; for its proponents it came to represent a change process which was global in aspiration and was increasingly intolerant of the apparent incoherence of mixed measurement systems".

Note 8. It is worth mentioning that the companies included in the sample analyzed rarely opted for the "revaluation method" involving the periodic revaluation to *fair value.*

Note 9. While the criteria referred to under points 1, 2 and 3 entail an objective choice where the percentage is higher, the criterion referred to under point 4 entails a subjective choice of the authors, formulated as a direct consequence of the degree of subjectivity appreciated in this study.

Note 10. Strictly speaking, the most relevant means of non-compensated effects are related to the fair value evaluation of financial instruments; however, provided that financial instruments are studied in connection with the above point 1, we focused on the second most relevant effect, related to the evaluation of intangible assets.

Note 11. Strictly speaking, the most widespread adjustment is related to intangible assets; however, provided that intangible assets are studied in connection with the above point 2, we focused on the second most frequent effect, related to the calculation of severance payments.

Note 12. By *accounting system* we make reference to the whole of the accounting theories, conventions and practices.

Note 13. The calculation, in case the reporting period coincides with the calendar year, is the following: TFR on 31/12/X = TFR on 31/12/X-1 + Revaluation of TFR on 31/12/X-1 + the portion of TFR accrued in the reporting period X; in detail:

Revaluation of TFR on 31/12/X-1 = (1.5 + 75% of Istat cost-of-living index) /100 x TFR on 31/12/X-1;

Portion of TFR accrued in the reporting period X = Annual compensation / 13.5.

Note 14. For the sake of completeness: the goals can vary from a "formal" purpose – the faithful, clear and truthful representation of the financial situation – substantially unexpressed, to the explicitly stated purpose of providing groups of priority stakeholders with relevant information in the decision-making process: the object can vary from figures on income and capital, characterized by "wise and cautious pragmatism" (Capaldo, 1998) and measured in the view of the fact that financial statements pursue "organizational" purposes (distribution of dividends, calculation and payment of tax, payment to withdrawing stakeholders, etc.) to figures on income and capital providing information on the performance of the entity in terms of cash generating ability.