

The value relevance of a newly adopted accounting standard: the case of business divestitures under IFRS 5 versus SFAS 144

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ABSTRACT: (THE VALUE RELEVANCE OF A NEWLY ADOPTED ACCOUNTING STANDARD: THE CASE OF BUSINESS DIVESTITURES UNDER IFRS 5 VERSUS SFAS 144). Based on the notion of the relevance of research investigating about the value relevance of accounting amounts, the aim of this article is to test the value relevance of the income (or loss) from asset or business disposals named as "discontinued operations" to equity investors in two competing markets with different institutional and legislative frameworks (common versus code-law): US and Europe. Indeed, the release of IFRS 5 allow comparing the value relevance of reporting practices related to business divestitures under SFAS 144 currently adopted by US firms and IFRS 5 in use among EU firms. Based on a sample of more than 2000 US and EU listed firms over the 2005-2006 period, we verify whether both there are jurisdiction-related differences in the value relevance of the income from discontinued operations and the divestiture of a loss-making business is considered as good news by investors. The key finding of our empirical analysis is that US and EU firms communicate the nature and the associated value impact of their business divestitures to their respective market differently. While in the US market the way firms prepare their financial statements allows investors to assign no relevance to profit-making divestitures and value relevance to loss-making divestitures, the reverse occurs in the EU market where a firm's decision to divest or not conveys the same type of information (of value irrelevance) to investors and the information on the undertaking of a loss-making divestiture is not relevant to future corporate value creation.

1. Introduction

The purpose of this article is to investigate about the value relevance of the income (or loss) from discontinued operations. Reporting on discontinued operations has been part of the convergence project carried out by the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB). The related new standards - SFAS 144 and IFRS 5 - became effective in US in 2001 and in Europe in 2005, respectively.

When the new reporting system on discontinued operations has been introduced in US, the FASB has welcomed it with the following words (1):

"The new reporting requirements for discontinued operations will allow an entity to more clearly communicate in the financial statements a change in its business that results from a decision to dispose of operations and, thus, provide users with information needed to better focus on the ongoing activities of the entity".

Prior literature has found the reporting of discontinued earnings, along with the reporting of other non-recurring items, complex to interpret (2)(3)(4). However, as the above literature has relied on the empirical evidence arising from financial statements prepared before the release of the new

(1) MACDONALD L., *News release: FASB Issues Statement No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets*, News Release of Financial Accounting Standards Board, 10/3/2001.

(2) LANDSMAN W.R., MILLER B.L. and YEH S., *Implications of Components of Income Excluded from Pro Forma Earnings for Future Profitability and Equity Valuation*, Journal of Business Finance & Accounting, 2007, 34 (3/4), 650.

(3) DOYLE, J. R., LUNDHOLM J.R. and SOLIMAN M., *The Predictive Value of Expenses Excluded from Pro Forma Earnings*, Review of Accounting Studies, 2003, 8, 145-174.

(4) GU Z. and CHEN T., *Analysts' Treatment of Nonrecurring Items in Street Earnings*, Journal of Accounting & Economics, 2004, 38(1-3), 129.

reporting rules, it may be useful to get insights into the value relevance of the income (or loss) from discontinued operations under the new accounting standards with the aim of verifying the expected equity value forecasting properties associated with the actual accounting amounts.

IFRS 5 addresses the accounting treatment of non-current assets held for sale, that is assets whose carrying amount will be recovered principally through sale rather than continuing use in the business, and also applies to certain current assets and (possibly) directly associated liabilities where they form part of a “disposal group”. This commonly occurs when a firm decides to dispose of a group of interconnected assets and liabilities in a single transaction, such as in the event of the disposal of a subsidiary.

In this context, the motivation of our study is based on the notion of the relevance of investigating about the value relevance of accounting amounts as provided – with a word play – by prominent researchers in 2001 ⁽⁵⁾. Relevance and reliability are the two primary criteria the FASB uses for choosing among accounting alternatives, as specified in its Conceptual Framework. Under SFAC 5 (1984), an accounting amount is relevant if it is capable of making a difference to financial statement users’ decisions, and is reliable if it represents what it purports to represent. Using well-accepted valuation models, value relevance research attempts to operationalize key dimensions of the FASB’s theory to assess the relevance and reliability of accounting amounts. Because a primary focus of the FASB (and other standard-setters such as the IASB) is equity investment, the main purpose of value relevance studies is to assess whether particular accounting amounts reflect information that is used by investors in valuing firms’ equity. Based on the extant literature, an accounting amount is defined as value relevant if it has a predicted association with equity market values ⁽⁶⁾. This will occur only if such amount is also measured reliably enough to be reflected in share prices.

In light of the above, our aim is to test the value relevance (for equity investment’s purposes) of the accounting amount related to the income or loss from discontinued operations in two competing markets, such as the US and the EU market (where the latter is represented by the aggregation of data pertaining to the major countries), with different institutional and legislative frameworks (common versus code-law). Indeed, the release and implementation of IFRS 5 in Europe allow comparing the value relevance of the accounting amounts related to business divestitures between the EU and the US market. More specifically, we focus on the first-time adoption of IFRS 5 across European firms arguing that when a new accounting standard is implemented in Europe (such as the case of IFRS 5) it is predominantly the result of an action undertaken by the IASB to realize part of the convergence process with the set of rules set out by the FASB, with the European standard thus following the earlier application of its US GAAP equivalent. Our claim is that, notwithstanding the substantial differences often existing between the original US and the newly adopted EU accounting principle, investors would tend to fall into the trap of interpreting the external information provided by EU listed firms using the common knowledge on the preceding US GAAP-based statement inspiring the European standard. This may create a distorting flow of information between EU

⁽⁵⁾ BARTH M.E., BEAVER W.H. and LANDSMAN W.R., *The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting: Another View*, Journal of Accounting and Economics, 2001, 31, 77-104.

⁽⁶⁾ Although the literature examining such associations extends back over 40 years with the study of Miller and Modigliani (1966), the first article that uses the term “value relevance” to describe this association is Amir (1993). See: MILLER M.H. AND MODIGLIANI F., *Some Estimates of the Cost of Capital to the Electric Utility Industry 1954-57*, The American Economic Review, 1966, 56, 333-391; AMIR E., HARRIS T.S. AND VENUTI E.K., *A Comparison of the Value-Relevance of U.S. Versus Non-U.S. GAAP Accounting Measures Using Form 20-F Reconciliations*, Journal of Accounting Research, 1993, 31, 230-264.

listed firms and potential investors under first-time adoption of an EU accounting standard. Accounting amounts reported in financial statements are misinterpreted by investors and corporate information is not reliably reflected in equity valuation, thus diminishing its value relevance power.

Bearing these objectives in mind, we believe that such a puzzling phenomenon in standard-setting practices and their associated effects on use of corporate external information in financial markets can be fruitfully investigated looking at the early adoption of IFRS 5 in Europe. In this sense, our research question is twofold.

First, we intend to verify whether there are jurisdiction-related differences in the value relevance of the income from discontinued operations. Because of its transitory nature, such form of income should have no (or very low) value relevance to equity investors. We predict that financial statements prepared by firms listed in the US market, which is strongly efficient - as it is suitable for capital markets of a common-law country relying on a long tradition of financial analysis - and has been timely in adopting the reporting rules on asset/business disposals (as contained in SFAS 144), are capable of properly communicating the transitory nature of such income to investors (7). Instead, financial statements prepared by firms operating in Europe, where the equivalent accounting standard (IFRS 5) has been only enforced four years later (2005) and capital markets (especially of Southern Europe's countries) are semi-strongly efficient (e.g., past returns and published information but not outcomes of advanced financial analysis are reflected in stock prices), are less likely to be able to communicate such information properly to investors.

Second, we aim to verify whether the divestiture of a loss-making business is considered as good news by equity investors based on the information provided by financial statements. Our claim is that the information flows between US firms and investors under SFAS 144 would allow the latter to detect the positive fact that, if a loss-making business is divested, its diseconomies will no longer impact the prospects of the reporting firm. It follows that the accounting amount associated with a loss from discontinued operations is value relevant to investors willing to invest in stocks issued by US firms. By contrast, the investors in EU firms' stocks would rely on financial statements conveying poorer external information that prevents them from distinguishing between a firm's decisions to divest a profit-making versus a loss-making business. While the investor appears to be neutral to the effects of the above decisions, such types of divestitures have a very different degree of value relevance. This may inevitably create a distortion in the equity valuation process involving European firms.

In particular, it should be noted that - because our aim is to disentangle the reasons lying behind the potentially inefficient equity valuation process followed by investors in reaction to the release of a new accounting standard leading to further convergence with US GAAP - the best way to empirically capture the predicted misuse of IFRS 5 in the presence of its fully known US GAAP equivalent (SFAS 144) is to contrast what financial statements of European firms convey under first-time adoption of IFRS 5 with what those prepared by US firms pass on to the same global financial community at the same time.

The remainder of this paper is organized as follows. Section 2 provides a background concerning the current reporting rules on discontinued operations. Section 3 contains a review of the prior literature. Section 4 formulates the relevant hypotheses. The procedures for constructing the sample are described in Section 5, followed by the research design in Section 6. Section 7 explains the

(7) BALL R., KOTHARI S.P., ROBIN A., *The Effect of International Institutional Factors on Properties of Accounting Earnings*, op. cit., pag.7.

findings of our empirical study and, by drawing some policy implications, provides two key recommendations to standard-setters. Section 8 concludes.

2. Background: SFAS 144 and IFRS 5

The IASB sets out the new requirements relating to asset disposals and discontinued operations in March 2004 through the issuance of International Financial Reporting Standard (IFRS) 5 *Non-current Assets Held for Sale and Discontinued Operations*. IFRS 5 replaces IAS 35 *Discontinuing Operations* and is applied starting from January 1, 2005.

The preparation of the IFRS 5 derives from the IASB and FASB's convergence project aiming at reducing the differences between European standards and US GAAP. In particular, IFRS 5 results from the IASB's review of the FASB's standard SFAS 144 *Accounting for the Impairment or Disposal of Long-Lived Assets* issued in 2001. The IFRS 5 achieves substantial convergence with the requirements of SFAS 144 relating to assets held for sale, the timing of the classification of operations as discontinued and the presentation of such operations. The impairment of long-lived assets to be held and used is an area in which there are extensive differences between IFRSs and US GAAPs. However, those differences were not thought to be capable of resolution in a relative short time.

IFRS 5 addresses the disposal of non-current assets individually, collectively, or as a group. In the latter case, the term "disposal group" is used. According to this standard, assets that are expected to be sold and meet specific criteria must be accounted for in the financial statements. Such assets shall not be depreciated and presented separately in the balance sheet.

Assets are deemed as *held for sale* if the carrying amount will be recovered principally through a sale transaction rather than through continuing use. The following criteria must be satisfied for an asset to be qualified as held for sale:

- management, of an appropriate seniority to approve the action, is committed to a plan to sell;
- the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are customary for sales of such assets (or disposal groups);
- an active program to find a buyer and other actions required to complete the plan to sell the asset (or disposal group) are initiated;
- the sale is highly probable, and is expected to qualify for recognition as a completed sale, within one year from the date of classification as held for sale ⁽⁸⁾;
- the asset (or disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value;
- actions required to complete the plan indicate that any significant change to this plan or its withdrawal is unlikely.

If the above criteria are not met during the reporting period, but after the balance sheet date and prior to the issuance of the financial statements, then the assets cannot not be classi-

⁽⁸⁾ IFRS 5 does not prevent assets from being held for sale for more than one year. Indeed, such a situation could be expected to exist where a disposal group is up for sale as a going concern. Under this circumstance, negotiations and due diligence processes preceding the actual trade can be time consuming. In this case, when the trade is expected to take place after the next balance day, the expected net realizable value of the asset (or disposal group) must be discounted to a present value in determining its carrying amount.

fied as held for sale. This is because financial statements must reflect the conditions existing at the balance date. However, as this represents a subsequent event affecting the interpretation of the financial statements, IFRS 5 requires an entity to provide in the related notes: a) a description of the non-current asset or disposal group; b) a description of the facts and circumstances leading to the expected disposal and the expected manner and timing of that disposal and, if applicable, the segments to which the non-current asset or disposal group pertains.

IFRS 5 states that an asset held for sale, whether a single asset or a disposal group, shall be measured at the lower of its carrying amount and fair value less costs to sell ⁽⁹⁾. Any potential write-down to fair value (less costs to sell) is treated as an impairment loss. If an impairment loss is recognized for a disposal group, IAS 36 Impairment of Assets is applied in order for the write-down to be apportioned across the assets. More specifically, a fair value assessment is required when non-current assets are acquired in a business combination (according to IFRS 3), but there is an intent to immediately resell them.

In the absence of a proper depreciation, if the asset measured at the fair value less the costs to sell experiences a decline in its value, it is written down and an expense is recognized. In essence, any depreciation is measured as the change in fair value (less costs to sell).

Subsequent to the classification of a non-current asset (or a disposal group) as an asset held for sale, circumstances – such as the decision not to sell or any of the above criteria no longer being met – could arise leading to the asset no longer being so classifiable. Should this happen, the related asset (or disposal group) shall be measured at the lower of:

- (a) its carrying amount before the asset (or disposal group) was classified as held for sale adjusted for any depreciation/amortization that would have been recognized if the asset had not been classified as held for sale, and
- (b) its recoverable amount at the date of the subsequent decision not to sell ⁽¹⁰⁾.

Any adjustment of this kind to the carrying amount of the asset or disposal group must be recognized in the income from continuing operations ⁽¹¹⁾.

Furthermore, IFRS 5 requires that only operations forming business units or pertaining to specific geographical areas that are subject to disposal are classified as *discontinued*. The key difference between IFRS 5 and SFAS 144 lies in the scope of such discontinued operations. Under SFAS 144, a component of the entity held for sale falls under discontinued operations presentation if it has operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the ongoing operations of the entity. The scope under IFRS 5 is much narrower. Separate presentation of discontinued operations is only allowed if the asset to be divested represents a separate major line of business or geographical area of operations. Currently, the FASB and IASB are undertaking a joint-project to develop a converged definition of discontinued operations following the consensus according to which the scope of the latter operations should be limited to only large transactions such as the divestiture of an entire operating segment.

The firm shall present and disclose information enabling users of financial statements to evaluate the financial effects of discontinued operations and disposals of non-current assets

⁽⁹⁾ Costs to sell are those incremental costs directly attributable to the disposal of an asset (or disposal group), excluding finance costs and income tax expense.

⁽¹⁰⁾ Recoverable amount is defined as the higher of an asset's fair value less costs to sell and its value in use.

⁽¹¹⁾ Any gain (or loss) from re-measurement of a non-current asset or a disposal group previously classified as held for sale must be reported in the profit or loss from continuing operations in the income statement.

(or disposal groups) ⁽¹²⁾. Management shall disclose in the income statement a single amount comprising the total of the after-tax profit (or loss) of discontinued operations and the after-tax gain (or loss) deriving from the write-down of the assets involved to fair value (less costs to sell) or their disposal individually or as a group constituting the discontinued operation, as follows:

	<u>2008</u>	<u>2007</u>
Profit before income tax	XXX	XXX
Income tax expense	(XXX)	(XXX)
Profit from continuing operations	<u>XXX</u>	<u>XXX</u>
Profit (loss) from discontinued operations	<u>XXX</u>	<u>XXX</u>
Profit for the period	XXX	XXX

Additionally, the firm shall report in the notes of the income statement (or alternatively in a clearly identified section of the income statement relating to discontinued operations):

- revenues, expenses, pre-tax profit (or loss) and income tax expense associated with discontinued operations;
- gain (or loss) recognized on the re-measurement to fair value less costs to sell or on disposal of the assets or disposal group(s) comprising the discontinued operations (including the related income tax expense);
- net cash flows attributable to the operating, investing and financing activities of discontinued operations ⁽¹³⁾ ⁽¹⁴⁾.

Additionally, the firm shall present a non-current asset and/or the assets of a disposal group classified as held for sale separately from other assets in the balance sheet. The same applies to the liabilities of a disposal group classified as held for sale. Those assets and liabilities shall not be offset and presented as a single amount.

To illustrate the above reporting rules as indicated in the IFRS 5, one can consider the following Stock Exchange release:

“Outokumpu has today signed a sale and purchase agreement with Cupori Group Oy whereby Outokumpu will sell its remaining copper tube assets to Cupori Group Oy, a company owned by the current top management of Outokumpu’s Copper Tube and Brass division. The total consideration of the sale is some € 50 million. Outokumpu will book a capital loss of some € 65 million on the transaction. Subject to usual conditions, the transaction is scheduled to be closed mid May 2008... The assets sold comprise the copper plumbing installation and industrial tube manufacturing companies in Pori in Finland, Zaratamo in Spain, Vasteras in Sweden and Liege in

⁽¹²⁾ The firm is required to report any gain (or loss) recognized on re-measurement of a non-current asset or a disposal group – unless it satisfies the definition of discontinued operation – classified as held for sale, in the profit or loss from continuing operations in the income statement.

⁽¹³⁾ Disclosure of gains (or losses) from fair value re-measurement and/or non-current asset disposal and related net cash flows is not required for newly acquired subsidiaries classified as disposal groups.

⁽¹⁴⁾ For those assets that have been sold in the current period or are held for sale and not yet sold, IFRS 5 requires the reporting entity to disclose in the notes of the income statement: a) a description of the non-current asset or disposal group; b) a description of the facts and circumstances of the sale or leading to the expected disposal, and the expected manner and timing of that disposal; c) if applicable, the segment in which the non-current asset (or disposal group) is reported under IAS 14 Segment Reporting and IFRS 8 Operating Segments.

Belgium... In 2007, the businesses in question generated sales of some € 510 million with a net loss of some € 5 million... As the business in question has been reported as a discontinued operation in Outokumpu's accounts, the transaction does not have an effect on the Group's sales nor operating profit figures. The capital loss on the transaction will be reported in the line "net profit for the period from discontinued operations" in the Group's income statement" (April 28, 2008 at 12:00 pm).

3. Literature review

Management and analysts may in some cases produce an earnings number from which they have excluded certain nonrecurring or unusual items from reported earnings. The motivation for producing these "pro forma" or "street" earnings is that they are presumed by managers and analysts to more accurately reflect the firm's true earnings power. When such "pro forma" or "street" earnings are prepared, excluded items are assumed to be forecasting or value *irrelevant*. Empirical findings are however mixed.

For example, some authors suggest that analysts have expertise to process earnings information and that certain items are justifiably excluded when producing 'street' earnings. They find that the nonrecurring items, included by analysts in street earnings, are more persistent and have higher multiples than those items they excluded from street earnings ⁽¹⁵⁾.

Other authors have a different approach as they examine future cash flows after excluding expenses in pro forma earnings. They find that a greater amount of exclusions leads to relatively lower future cash flows and relatively lower stock returns. In addition, financial markets do not fully appreciate the predictive power of the excluded expenses ⁽¹⁶⁾.

Prior academic work focuses on those components of earnings that analysts typically exclude from US GAAP net income examining whether or not they are forecasting relevant. Their evidence suggests that capital markets may misprice both positive and negative excluded components ⁽¹⁷⁾. In this respect, their findings on market inefficiency are consistent with prior evidence.

The accounting doctrine analyzes differences in the timeliness of income recognition between US GAAP and UK GAAP in the 1976-96 period. They examine both earnings before extraordinary items and earnings after extraordinary items. US GAAP earnings, measured both before and after extraordinary items, exhibit similar timeliness properties. In contrast, UK GAAP earnings before extraordinary items are significantly less timely with respect to bad news than earnings after extraordinary items. However, UK GAAP earnings are significantly more timely in the recognition of bad news than US GAAP earnings ⁽¹⁸⁾. These results suggest that UK firms recognize bad news faster than US firms, but that they classify bad news differently. This is consistent with: I) the greater latitude in the accounting for extraordinary items under UK GAAP; II) regulatory and litigation costs that are higher in United States; III) conservatism.

⁽¹⁵⁾ GU Z. AND CHEN T., *Analysts' treatment of nonrecurring items in street earnings*, op. cit. pag. 2.

⁽¹⁶⁾ DOYLE, J. R., LUNDHOLM J.R. AND SOLIMAN M., *The Predictive Value of Expenses Excluded from Pro Forma Earnings*, op. cit. pag. 2.

⁽¹⁷⁾ LANDSMAN W.R., MILLER B.L. AND YEH S., *Implications of Components of Income Excluded from Pro Forma Earnings for Future Profitability and Equity Valuation*, op. cit. pag. 2.

⁽¹⁸⁾ POPE P.F. AND WALKER M., *International Differences in the Timeliness, Conservatism, and Classification of Earnings*, *Journal of Accounting Research*, 1999, 37, 53-87.

The doctrine also compares timeliness and conservatism of accounting income in common-law and code-law countries in years 1985-95. They find that accounting income in common-law countries are significantly more timely due to greater sensitivity to economic losses. Differences between common-law and code-law countries are explained with institutional features in regulations and markets. After IFRS and US GAAP are harmonized these differences ought to be smaller ⁽¹⁹⁾.

According to prior literature, the nature of asset write-offs is confusing to investors because they are infrequent and often ambiguous in the information they convey. Namely, a write-off may indicate management's intent to get rid of an unprofitable business and should thus be considered as a good news. A write-off may also convey information about the reductions in asset values and even deeper troubles yet to come. The authors provide evidence of price declines in years preceding write-off announcements by examining why important corporate events such as write-offs, averaging around 20% of firm's market values, are associated with stock price responses of less than 1%. They interpret the decline as a presumable indication of the market's recognition of events accounted for by the write-off. They also recognize that it is not surprising that accurate adjustments in stock prices do not accompany the write-off announcements, because in the period from 1984 to 1985 write-off decisions are largely subjective resulting in widely divergent timing, measurement, and reporting practices ⁽²⁰⁾.

Past authors examine investor reactions to discontinued operations disclosures. They focus on the prior operating performance of the discontinued segment to predict which write-downs of assets are timely and which are delayed, and examine the role of prior disclosure of the operating performance of the assets being written down. The results suggest that the market responses to discontinued operations disclosure could be explained with differences in the timeliness of write-downs and differences in the degree of transparency of segment operating results. They find that investors anticipate write-downs of segment operating assets before divestiture and recognition occurs providing evidence for a negative association between write-down amounts and cumulative advance returns for those write-downs predicted as 'delayed' and no association between write-down amounts and advance returns for those predicted as 'timely'. 'Timely' write-downs are accompanied by significantly negative reactions when the divestiture is publicly announced, while those public announcements associated with disposals of segments reporting 'delayed' write-downs are accompanied by significantly positive reactions. It should be noted that the sample period analyzed ranges from mid-1980s to early 1990s when discontinued operations used to be reported according to APB 30, which has been superseded by SFAS 144 in 2001⁽²¹⁾.

Conclusively, there is a new direction in the accounting literature that explores the strategic use of discontinued operations highlighting that managers may tend to classify core operating expenses as discontinued in an effort to artificially inflate continuing income ⁽²²⁾.

⁽¹⁹⁾ BALL R., KOTHARI S.P., ROBIN A., *The Effect of International Institutional Factors on Properties of Accounting Earnings*, Journal of Accounting and Economics, 2000, 29, 1-51.

⁽²⁰⁾ BARTOV E., LINDAHL F., W. AND RICKS W., *Stock Price Behavior Around Announcements of Write-Offs*, Review of Accounting Studies, 1998, 3, 327-346.

⁽²¹⁾ COLLINS D. AND HENNING S., *Write-Down Timeliness, Line-of-Business Disclosures and Investors' Interpretations of Segment Divestiture Announcements*, Journal of Business Finance & Accounting, 2004, 31(9)&(10), 1261.

⁽²²⁾ BARUA A., LIN S. AND SBARAGLIA A., *Earnings Management Using Discontinued Operations*, Working Paper, 2009, Florida International University.

4. Hypotheses Formulation

We formulate our hypotheses on the basis of both two prior studies specifically related to reporting of discontinued operations (IFRS 5/SFAS 144) and, more in general, the literature concerning the value relevance of transitory accounting items.

As regards our first hypothesis, we first follow prior research providing substantial evidence that income classified as transitory, such as extraordinary items or discontinued operations, is less associated with a firm's future performance⁽²³⁾. Second, we refer to a specific study that, following the debate on the above described need for a converged definition of discontinued operations by FASB and IASB and their related joint-project, investigates whether a broader classification rule for discontinued operations in line with SFAS 144 may provide a more homogenous partitioning between continuing and discontinued operations for divestitures, thereby increasing the usefulness of disaggregated income components in predicting an entity's future performance⁽²⁴⁾. The attempt of the authors to prove that the current direction of the FASB/IASB to narrow the scope of transactions included in discontinued operations should not be supported is based on the similarity between the definition of divestitures indicated in IFRS 5 and that contained in APB 30 and the evidence that more firms report discontinued operations under SFAS 144 relative to APB 30. In so doing, they find that while continuing income has a positive and significant association with future stock returns, the association between future stock returns and the total income or loss from discontinued operations is never statistically significant regardless of the reporting regime (SFAS 144 versus APB 30).

Following the standard setters' assumption that investors are able to decompose the income of discontinued operations from the total net income reported, the first hypothesis we intend to test is the following:

H1 - In forecasting a firm's future profitability, equity investors assign a lower weight to income from discontinued operations compared to income from continued operations.

Similarly, our second hypothesis is formulated on the basis of another specific study⁽²⁵⁾. Based on the prior literature showing that the institutional background of a country has several effects on the financial reporting standard setting and the need for published financial information, the study in question investigates whether IFRSs improve the usefulness of accounting information in a chosen code-law country – such as Finland – where domestic, high-quality GAAPs differ significantly from IFRS and the system of legal enforcement is strong. What prior literature suggests is that the extent to which external corporate information is prepared in credit-based, code-law countries must be opposed to that of equity-based, common-law countries. While the former – where capital is mainly provided by the state, banks or

⁽²³⁾ LIPE R., *The Information Contained in the Components of Earnings*, Journal of Accounting Research, 1986, 24 (Supplement), 37-64; FAIRFIELD P., WHISENANT S. AND YOHN T., *Accrued Earnings and Growth: Implications for Future Earnings Performance and Market Mispricing*, The Accounting Review, 2003, 71, 3, 337-355; HERMANN D., INOUE T. AND THOMAS W., *The Persistence of Forecast Accuracy of Earnings Components in the USA and Japan*, Journal of International Financial Management and Accounting, 2000, 11, 1, 48-70; BURGSTAHLER D., JIAMBALVO J. AND SHEVLIN T., *Do Stock Prices Fully Reflect the Implications of Special Items for Future Earnings?*, Journal of Accounting Research, 2002, 40, 585-612

⁽²⁴⁾ CURTIS A., MCVAY S. AND WOLFE M., *An Analysis of the Implications of Discontinued Operations for Continuing Income*, SSRN Working Paper, 2010.

⁽²⁵⁾ LANTTO A.M., *Does IFRS Improve the Usefulness of Accounting Information in a Code-Law Country*, SSRN Working Paper, 2007.

insiders (i.e., families) – are characterized by a low demand for transparent financial disclosure because economic systems are not capital market-oriented, the latter – where capital supply derives from private investors operating outside the firm’s boundaries – require a timely and frequent “public” accounting-based information. It follows that, in general, firms in code-law countries – where IFRS are adopted to improve investor protection, capital markets’ accessibility and information comparativeness – report more useful financial statement information after the adoption of IFRSs than before.

In light of the above, the empirical study in question based on three surveys submitted to financial analysts, managers and auditors supports the notion that new information provided by listed firms in a code-law country (Finland) under IFRSs (also using judgment) is relevant. While financial analysts are asked whether they use information provided by IFRSs that complements Finnish GAAPs and whether they find such information useful (relevance), managers and auditors are asked to evaluate the true view of information presented via IFRSs (reliability). Analysts confirm that IFRSs improve the relevance of accounting information, while managers and auditors are concerned about the reliability of those financial statement items prepared using judgment (such as those resulting from impairment exercises). Interestingly, financial analysts find it useful that information relating to non-current assets held for sale and discontinued operations are disclosed and managers and auditors agree on the common perception that such information prepared in accordance with IFRS 5 gives a true view. More specifically, analysts confirm the usefulness (and preparers/enforcers highlight the reliability) of the separate reporting of pre (post)-tax profit and loss from discontinued operations.

Based on the relevance and reliability of reporting about loss-making divestitures, we formulate the second hypothesis as follows:

H2 - The loss from discontinued operations is value relevant in the equity market.

In testing the two above hypotheses, we look at the valuation exercise performed by equity investors in two competing markets such as the US and the EU market, where listed firms must report on disposals of non-current assets and discontinued operations according to equivalent but not equal accounting standards: SFAS 144 and IFRS 5.

5. Sample

Our analysis is based on a sample of financial and non-financial, listed firms whose data are retrieved from Thomson One Banker ⁽²⁶⁾. The sample does not comprise any firms whose shares are quoted in more than one stock exchange. The period under examination is 2005-2006 for two main reasons: 1) 2005 is the year starting from which the IFRS 5 is adopted in Europe; 2) two fiscal years (2005-2006) are needed to simulate the option provided to firms as to whether the asset or business divestiture is carried out in one single fiscal year (when the profit or loss from discontinued operations is reported along with the separation of the asset or the disposal group from the rest of the assets in the balance sheet) or in two consecutive fiscal years (when only the asset or disposal group is reported as “held for sale” in the balance sheet in year 1 and the net economic result – profit or loss – from the divestiture is reported in the income statement in year 2 when the sale is actually closed). It should be noted that the

⁽²⁶⁾ Key empirical findings do not differ depending on the type of firm (non-financial vs. financial) involved.

dataset coverage is not further extended to follow-on years when the IFRS 5 is fully implemented because the focus of our study is on the adoption period. Furthermore, for the reasons described above, the sample does not comprise US listed firms reporting a profit or loss from discontinued operations under first-time adoption of SFAS 144 but it is limited to those reporting such accounting amounts in the 2005-2006 period. This permits to compare and contrast the use of corporate external information among investors operating in the US and EU competitive markets at the same relevant time.

The sample selection method used in this study aims to enhance the power of statistical tests while maintaining sufficient generalizability of the results. The sampling procedure that starts collecting firm-year data from the 2005-2006 Worldscope database generates 2.859 observations forming a mixed sample made of both European and US firms which report an income or loss from discontinued operations in 2005 or 2006 ⁽²⁷⁾. Firms are classified as being European or US-based according to the country where the Stock Exchange where a firm's stock is listed operates. We then eliminate observations with negative equity, negative earnings or short fiscal year (a total amount of 791 observations). In particular, loss-making firms are excluded because, if market is efficient, they will be out of business sooner or later. As the dependent variable of our regression model – as better explained in the next paragraph - is represented by growth expectations, it would not make any economic sense to look at firms with a low likelihood of survival and poor growth prospects. More specifically, with regard to the exclusion of loss-making firms, our claim is that the value relevance or irrelevance to investors of a reported loss from business divestiture may be better captured by our proposed econometric model if the sample considered is only made of profit-making firms. Indeed, the purpose of our study is to test the efficiency of financial statement-based information flows between firms and investors. We believe that the examination of the interaction effects associated with a loss-making firm divesting a loss-making business would prevent one from fully detecting and isolating the investors' recognition of value relevance properties of the latter accounting amount without adding much to the key findings.

Hence, for the purpose of testing the above two hypotheses, we end up having a preliminary sample of 2.068 firm-years. Finally, observations are removed if the Belsley, Kuh, and Welsch (1980)'s diagnostic indicates that they are influential (e.g., the absolute value of the studentized residual is greater than 4 or the Cook's D statistic is greater than 1). This leads to a final sample of 2.059 firm-years.

6. Research Design

In this section, we present the econometric model adopted for examining the two hypotheses presented above (**H1** and **H2**). Our model is based on the notion of residual income (RI), which leads to one of the most common accounting valuation techniques: the residual income valuation model (RIM). The RIM is also referred to as the discounted abnormal earnings model (DAEM) and the Edwards-Bell-Ohlson model (EBOM), so named for some of the researchers

⁽²⁷⁾ If the divestiture occurs in year 2005, it may be closed either in 2005 or in 2006. In the first case, the divestiture spans only one fiscal year (t_0) with the related income or loss reported immediately in the income statement. In the second case, the divestiture spans two consecutive fiscal years (t_0 and t_1) with the related income or loss only reported in the income statement of the second year when the divestiture is closed. It results that 2005 is the focus year of the analysis and 2006 is only considered if the divestiture is extended beyond one fiscal year (up to t_1).

who first developed it, and is considered to be much less sensitive to errors in the inputs than the basic dividend discount model (DDM) ⁽²⁸⁾.

The basic idea that underlies the RIM is the so called “clean surplus relation”:

$$(1) \quad B_t = B_{t-1} + E_t - D_t$$

where B_t and B_{t-1} represent the book value per share at time period t and $t-1$ respectively, E_t are the earnings per share of the firm at time period t and D_t are the dividends distributed per share by the firm at time period t . This relationship reflects the fact that any item that enters onto a firm’s balance sheet must first pass through its income statement. By recursively substituting this expression into the basic DDM, that is:

$$(2) \quad P_0 = \frac{D_t}{r_e - g}$$

– where P_0 is the price of the stock at time 0, r_e is the required rate of return on equity capital and g is the constant rate at which future dividends grow over an infinite period of time – we obtain the formula for the RIM. Based on the RIM, the market value of a firm at time t (where t is time 0) is calculated as follows:

$$(3) \quad P_t = B_t + \sum_{t=1}^{\infty} \frac{E_t - r_e(t)B_{t-1}}{[1 + r_e(t)]^t}$$

Equation (3) presents the residual income valuation model according to which the value of a stock is equal to its book value per share plus the present value of expected future per share residual income.

Due to the infinite sum, the above formula can be hard to work with for practical purposes. Hence, Philips derives an equivalent formula for the RIM equation under the assumption that the return on equity (ROE) and the spread between return on capital and the cost of capital are time invariant. The Philips’ formula indicates that the residual income spread (in percentage terms) for time period t consists of the return on equity (ROE) less the required rate of return on equity capital (r_e) and that such a spread is multiplied by the book value of equity at the end of the previous time period. The RI spread times the book value of equity outstanding at the time period before the valuation yields the residual income expected at time t (E_t is the expectation operator applied to residual income and should not be confused with earnings per share at time t) and in any future period and if discounted and added to the current book value of equity as follows:

⁽²⁸⁾ As for the RIM, see EDWARDS E.O. AND BELL P.W., *Theory and Measurement of Business Income*, Berkeley, CA: University of California Press, 1961; FELTHAM G.A. AND OHLSON J.A., *Valuation and Clean Surplus Accounting for Operating and Financial Activities*, Contemporary Accounting Research, 1995, 11, 689-731; OHLSON J.A., *Earnings, Book Values, and Dividends in Equity Valuation*, Contemporary Accounting Research, 1995, 11, 681-687; STOWE J.D., ROBINSON T.R., PINTO J.E. AND MCLEAVEY D.W., *Analysis of Equity Investments: Valuation*, Charlottesville, VA: Association for Investment Management and Research, 2002. As for the lower sensitivity of the RIM to errors in the inputs (as compared to DDM), see PHILIPS T.K., *Estimating Expected Returns*, Journal of Investing, Fall 2003, 49-57; CLAUS J. AND THOMAS J., *Equity Premia as Low as Three Percent? Evidence from Analysts’ Earnings Forecasts for Domestic and International Stock Markets*, Journal of Finance, 2001, 56, 1629-1666.

$$(4) \quad P_t = B_t + \sum_{t=1}^{\infty} \frac{E_t [(ROE_t - r_{e,t}) B_{t-1}]}{[1 + r_{e,t}]^t}$$

it allows to conduct any equity valuation across capital markets into two building blocks: the current book value of equity plus the discounted sum of future (perpetual) residual income. The RIM yields fair market value estimates of equity as does the discounted cash flow model. The similarity between the two valuation models is proven empirically by prior literature⁽²⁹⁾.

Starting from the above RIM equation (4), we divide both sides by B_t and bring the ratio of the book value of equity at time t to itself to the left-hand side, which leads to equation (5):

$$(5) \quad \frac{P_t}{B_t} - 1 = \sum_{t=1}^{\infty} \frac{E_t [(ROE_t - r_{e,t}) B_{t-1}]}{[1 + r_{e,t}]^t} / B_t$$

Interestingly, the left-hand side of equation (5) reflects the difference between the market value and the book value of equity that, if positive (or greater than 1), implies that the firm in question is capable of creating future value accruable to the book value of equity. Future value creation is provided by the present value of expected future residual income (scaled by the book value of equity).

Next, as the discounted sum of future (perpetual) residual income is nothing than the discounted sum of future abnormal (net) earnings generated by business operations, the latter component of equation (5) can be proxied for by the future set of net incomes (scaled by the book value of equity) accruable to the firm as follows:

$$(6) \quad \frac{P_t}{B_t} - 1 = \sum_{t=1}^{\infty} \frac{Net\ Income_t}{B_t}$$

Based on the residual income valuation model presented above, we derive our econometric model that exploits the ordinary least square (OLS) regression technique as follows. The left-hand side of the regression equation (dependent variable) reflects the expectations on growth in firm i 's equity value ($P/B - 1$) as formulated by the equity analyst at the end of fiscal year t , where such growth is only due to production of future income. As we focus our analysis on the firm i 's growth realized at time t , the right-hand side of the regression equation only accounts for the net income projected for the year t .

Next, to measure the impact of the income or loss from an asset or business divestiture on the expected growth in a firm i 's equity value, we modify the right-hand side of our regression equation by dividing the *Net Income* at time t into two components: the income from continuing operations (*Normal Income*) and the income (or loss) from discontinued operations (*Income from Discontinued Operations or Loss from Discontinued Operations*). Both income components are calculated at time t . More specifically, the first component reflects the firm i 's ordinary income net of the income (or loss) from discontinued operations (which is represented as an isolated item).

In addition to the normal income and the income or loss from discontinued operations, we complete our regression model by adding a dummy that accounts for the occurrence of an

⁽²⁹⁾ LUNDHOLM R., O'KEEFE T. AND FELTHAM G.A., *Reconciling Value Estimates from the Discounted Cash Flow Model and the Residual Income Model*, Contemporary Accounting Research, 2001, 18 (2), 311-335.

asset or business divestiture spanning two consecutive fiscal years. Indeed, the extant literature suggests that there might be differences in equity valuation in case a firm decides to dispose of assets or business units by engaging in a transaction first announced to the market (through balance sheet reporting) and successively closed in the subsequent fiscal year (through income/loss reporting in the income statement) ⁽³⁰⁾ ⁽³¹⁾. We also include a set of control variables such as: i) size; ii) industry (nineteen two-digit SIC industries); iv) EU country (18 European countries vs. a non-EU country, that is US). The full set of the explanatory or independent variables is the following:

- *Normal Income* : firm i 's income from continuing operations in year t ;
- *Income from Discontinued Operations* : firm i 's income from discontinued operations in year t ;
- *Loss from Discontinued Operations* : firm i 's loss from discontinued operations in year t ;
- *Overlapping Divestiture*: dichotomous variable which is 1 if firm i reports income (or loss) from discontinued operations in two consecutive fiscal years ($t, t+1$) and 0 otherwise;
- *Size*: natural logarithm of firm i 's total assets at the end of year t , that is the proxy for corporate size;
- *Industry* and *Country* dummies. More specifically, the industry dummies are constructed on the basis of the two-digit SIC industries. They take the value of 1 if firm i belongs to one of the given two-digit SIC industries and are 0 otherwise. The same applies for the construction of the country dummies.

The final econometric model is the following:

$$\begin{aligned}
 (7) \quad \frac{P_{i,t}}{B_{i,t}} - 1 = & \beta_0 + \beta_1 \frac{\text{Normal Income}_{i,t}}{B_{i,t}} + \beta_2 \frac{\text{Income from Discontinued Operations}_{i,t}}{B_{i,t}} + \\
 & + \beta_3 \frac{\text{Loss from Discontinued Operations}_{i,t}}{B_{i,t}} + \beta_4 \text{Overlapping Divestiture}_{i,t} + \beta_5 \text{Size} + \\
 & + \beta_6 \sum_{s=1}^{19} \text{Industry}_s + \beta_7 \sum_{c=1}^{19} \text{Country}_c + \varepsilon_{i,t}
 \end{aligned}$$

7. Empirical Findings

7.1. Descriptive statistics

For all regressors used in the econometric model, as expressed in equation (7), the mean, median and standard deviation have been calculated. The mean of future value creation capabilities of firms contained in the sample as expected by equity analysts $[(P/B) - 1]$ is 1.82, the median is 1.17, and the standard deviation is 2.75. This demonstrates that, while value growth expectations are on average greater than one, there is a substantial amount of variation across sample firms. In line with what can be expected, the net earnings from discontinued operations are on average lower than

⁽³⁰⁾ ELLIOTT J.A. AND HANNA J.D. *Repeated Accounting Write-offs and the Information Content of Earnings*, Journal of Accounting Research, 1996, 34, 135.

⁽³¹⁾ BLACK, E.L., CARNES, T.A. AND RICHARDSON V.J., *The Value Relevance of Multiple Occurrences of Nonrecurring Items*, Review of Quantitative Finance and Accounting, 2000, 15 (4), 391.

those from continued operations (0.022 vs. 0.137) and the loss from such disposals is even lower (-0.016). The mean of $\ln(\text{total assets})$ is equal to 7.293 implying that the average size in terms of total assets of sample firms is 1.470 ($\exp^{7.293}$) USD million.

Countries represented in the sample are 19 of which 18 are EU states and 1 is US. Observations vary from the minimum of 6 for Ireland to a maximum of 1386 firm-years from the US, with U.K. representing the EU country with the highest number of firm-years (152). Industry dummies are chosen on the basis of the two-digit SIC codes represented in the sample, which amount to 19. The most represented industry in the sample is that of holdings (SIC 67) with 338 observations and the least represented one is metal mining (SIC 10) with only 12 firms operating in this specific sector.

7.2. *Key Findings and Policy Implications*

Our empirical analysis based on Table 1 yields the following interesting results ⁽³²⁾. It turns out that the value relevance of business divestitures is different in the US market as compared to the EU market depending upon their economic result.

Based on the SFAS 144, firms listed in the US market that decide to discontinue some of their operations report to potential investors whether the divestiture is a profit or loss-making one by separating out the individual asset(s) under disposal or the disposal group from the rest of assets and liabilities. The empirical evidence suggests that, when assessing abnormal earnings based on growth prospects, those investors willing to invest in firms listed in the US market *efficiently* capture the nature of the reported divestiture. If discontinued operations are profit-making, they would treat such an income as a transitory item as it will not have any influence on the firm's capability of creating value over the future. Indeed, the single asset (for example, a plant) or the business unit will be sold off within the next fiscal year (or at maximum the next two consecutive fiscal years) with the firm's current stock value reflecting not only the cash increase due to the attainment of the purchase price but most importantly all future growth prospects that depend on the firm's ability to generate normal income from continuing operations. This explains why the coefficient β_1^{US} associated with the *Normal income* is positive ($\beta_1^{US} = 10.64$) and statistically significant at 1% level as opposed to the coefficient β_2^{US} associated with the *Income from discontinued operations* which is close to zero and ($\beta_2^{US} = 0.02$) and not statistically significant. The income from those business operations that will be continued by management is assigned a positive weight from investors, while the income from assets or businesses divested is assigned a zero weight with the former of high relevance and the latter of no relevance to future corporate value.

If discontinued operations are loss-making, investors seeking to hold stocks issued by US firms would benefit from reporting practices based on the US GAAP (in this case, SFAS 144) and highly regard the asset or business divestiture as having an impact on future growth prospects. Indeed, the loss expensed as a result of the current divestiture may imply that the prospective structure of a firm's business operations will no longer be negatively affected by the presence of the diseconomies attributable to the loss-making asset or unit. The reporting of a loss from discontinued operations is thus to be considered as a good news by investors. This is empirically confirmed by the fact that the coefficient β_3^{US} associated with the *Loss from discontinued operations* is positive ($\beta_3^{US} = 7.43$) and statistically significant at 1% level. A loss-

⁽³²⁾ Our empirical findings present no degree of harmful multicollinearity.

making divestiture is assigned a positive weight by investors that would find it highly relevant to future corporate value creation because the management of the firm in question has been capable of restructuring its business operations by phasing out the parasitic unit (or asset).

In the event of an asset or business divestiture, the same reporting logic is also applied by firms listed in the whole EU market according to the IFRS 5. Our empirical analysis indicates that, when forecasting abnormal earnings to be incorporated in current stock price, investors willing to invest in firms listed in the EU market are not able to make any difference between the types of divestiture. If the divestiture generates a net profit, they would tend to attribute the same level of importance to both the *Normal income* and the *Income from discontinued operations* in terms of future value creation. Hence, it seems that the transitory nature of the latter item does not emerge from corporate financial statements of EU firms and investors end up accounting for both forms of income equally in their stock valuation process. This is reflected in the size and statistical significance of the regression coefficients in the model estimated for the EU market. Both the coefficient β_1^{EU} associated with the *Normal income* and the coefficient β_2^{EU} associated with the *Income from discontinued operations* are positive ($\beta_1^{EU} = 8.52$ and $\beta_2^{EU} = 6.63$) and statistically significant at 1% level implying that both forms of income are assigned a positive weight from investors being of equally great relevance to future corporate value.

If the divestiture generates a loss, investors seeking to hold stocks issued by firms listed in the EU market would tend to disregard the benefit of business restructuring and no importance would be attributed to discontinuing such operations in terms of future corporate prosperity. The empirical confirmation of such a misleading information flow existing between firms and investors in the EU market can be found in the coefficient β_3^{EU} associated with the *Loss from discontinued operations* that is close to zero ($\beta_3^{EU} = 0.026$) and not statistically significant.

Our empirical analysis indicates that the firm's decision to announce the disposal of an asset or business unit in one fiscal year and realize it in the subsequent one has no significant impact on the investors' expectations over future value creation. Indeed, both the coefficients associated with the *Overlapping Divestiture* ($\beta_4^{EU} = -0.27$ and $\beta_4^{US} = -0.13$) are not statistically significant. Yet their negative sign implies that investors require certainty about the outcome of the announced divestiture and would prefer seeing the asset or unit disposal announced and closed over the same fiscal year.

As for control variables, it must be highlighted that, as it is economically predictable, firms of bigger size (measured in terms of total assets) are expected to grow more than those of a smaller size. The coefficients of the *Size* variable measured as natural logarithm of total assets ($\beta_5^{EU} = +0.12$ and $\beta_5^{US} = +0.14$) are both positive and statistically significant at 1% level. This is due to the fact that the dataset consists of only a few new economy-based firms where the prevalence of tangible assets may matter less for growth's purposes.

The key finding of our empirical analysis is that US and EU firms communicate the nature and the associated value impact of their divestitures to their respective market differently. **H1** and **H2** are both verified in the US market where investors assign no relevance to profit-making divestitures and value relevance to loss-making divestitures. The reverse occurs in the EU market where no distinction is made between the decision to divest and not divest as both decisions convey the same type of information to investors and the information on the undertaking of a loss-making (rather than a profit-making) divestiture is not value relevant at all. The result is that **H1** and **H2** are in general not verified for the EU market even though there are substantial differences among European countries. While the most of the EU markets makes use of external information to the benefit of potential equity investors showing no value relevance properties

with regard to the types of business divestitures (profit versus loss-making), the only exceptions are represented by UK and Netherlands (whose markets are closer to those operating in US in terms of efficiency and common law tradition).

Conclusively, it should be noted that the different extent to which the income or loss from discontinued operations are value relevant in US and EU markets must not be interpreted as if US investors only invest in US listed firms and EU investors only concentrate their investments on EU listed firms but rather as if when cross-investing in both markets these two categories of investors have to deal with a different content of corporate external information.

Table 1 - Econometric Analysis

Variable	Pred. sign	dependent variable: (P/E)-1			
		Europe		US	
		Coefficient	t-statistic	Coefficient	t-statistic
<i>Normal income</i>	+	8.52	8.28 **	10.64	31.98 **
<i>Income from discontinued operations</i>	+	6.63	4.79 **	0.02	0.48
<i>Loss from discontinued operations</i>	+	0.026	0.025	7.43	17.22 **
<i>Overlapping Divestiture</i>	-	-0.27	-1.55	-0.13	-0.93
<i>Size</i>	+	0.12	3.50 **	0.14	6.61 **
<i>n</i>		673		1.386	
<i>R²</i>		0.519		0.455	
<i>Adj. R²</i>		0.487		0.442	

Firms and years are denoted by *i* and *t*. T-statistics are based on White (1980) heteroscedasticity-consistent standard errors. *** significant at the 0.01 level or better; ** significant at the 0.05 level or better; * significant at the 0.10 level or better.

Our empirical analysis highlights one policy implication and provides two recommendations to standard-setters. The key policy implication of our study is that new accounting standards set for the EU market are not fully known to investors upon first-time adoption. A high level of awareness on the content of new IFRSs that can be considered as being aligned with that existing in the US market for equivalent GAAPs is only achieved across the EU market after some time has passed from their release.

The first recommendation is that circulation of exposure drafts of new accounting standards, which are to be adopted as a result of a IASB-FASB convergence project and thus as the IASB's consideration of statements previously developed by FASB, should be arranged by IASB so as to reach a wider spread within the investors' community. This would avoid the trap into which investors may typically fall because of their knowledge of the original US GAAP-based statement inspiring the issuance of the new IFRS. If, as it often happens, there are substantial differences between the two, uninformed investors (that is, those that are not fully aware of the principles behind the new IFRS) may not be able to capture the different content of the external information provided by EU firms under first-time adoption. This would lead to major reported differences between IFRS and US GAAP net income such as those recently identified by some authors ⁽³³⁾. Based on this study, 11% (35) of the sample firms included an IFRS to US GAAP reconciling item for dis-

⁽³³⁾ GORDON E.A., JORGENSEN B.N. AND LINTHICUM C.L., *Could IFRS Replace US GAAP? A Comparison of Earnings, Attributes and Informativeness in the US Market*, Working Paper, 2010.

continued operations in the 2004–2006 period ⁽³⁴⁾. Of those 35 firm-years for which differences are reported, 4 are associated with a higher US GAAP net income, whereas 31 are associated with a lower US GAAP net income as compared with IFRS. Of the reconciling items detected, compensation differences correspond to higher US GAAP net incomes as compared with IFRS, whereas differences in accounting for business combinations drive US income lower than that reported under IFRS.

The second recommendation is that the differences between IFRSs and GAAPs should be minimized. One key difference that still exists between the IFRS 5 and SFAS 144 relates to the notion of discontinued operation. As better described above, the IFRS 5 provides that a certain operation is “discontinued” by an entity when one of its components corresponding to a cash generating unit or a group of cash generating units comprising operations and cash flows clearly distinguishable from the rest of the same entity – such as a major line of business or a geographical area of operations – is disposed of or classified as held for sale. It follows that a non-current asset is unlikely to satisfy such definition of discontinued operation and hence, according to the IFRS 5, a discontinued operation will always be represented by a disposal group. Nevertheless, the above definition of discontinued operation used by the IASB is narrower than the one contained in SFAS 144 in that it differs from the criterion of the divestiture size employed by the FASB and is instead based on the concept of “a separate major line of business or geographical area of business”. Because the notion of discontinued operation defined in the IFRS 5 is too vague and comparability in financial reporting may suffer, the IASB highlights in the standard that this should be considered as an interim measure having planned to undertake a short-term, joint convergence project with the FASB to arrive at a common definition.

In April 2007, the IASB agrees to add the joint-project with the FASB to its agenda leading to the issuance of an exposure draft in September 2008. The follow-on progress report jointly prepared by the IASB and FASB at the end of June 2010 indicates that their goal is to release an improved and converged standard within a reasonable period of time (e.g., end of 2011), where the IASB suggests that the definition of discontinued operations in IFRS 5 should be maintained with only some minor changes.

In sum, no substantial difference should exist between IFRSs and GAAPs so as to avoid tedious reconciliations and allow investors to compare US and EU firms’ economic and financial results more efficiently. In a global economy major accounting treatments should be uniform with no room for confusion or manipulation. The IASB and FASB should make any effort to reach convergence on new standards and set out the new ones in full harmony.

7.3. Limitations and Extensions

The main limit of our empirical study is that we only focus on the first-time adoption of IFRS 5 in Europe, which urges one to consider our findings as being rather preliminary. The primary objective of the article has also driven the construction of the empirical framework where financial information provided by EU and US listed firms reporting a profit or loss from discontinued operations to the investors’ community is contrasted in the period of early implementation of IFRS 5

⁽³⁴⁾ The study is based on a sample of firms using IFRS for their financial statements in their home country and filing US GAAP reconciliations with the SEC and is aimed at examining the quality of IFRS reported earnings as compared with US GAAP.

in Europe.

A potential extension of our work could be related to the investigation about the extent to which financial information flows between firms and investors are efficient upon first-time adoption of SFAS 144 and IFRS 5. This would complement our analysis as one could get insights into whether or not investors fully incorporate the true nature of specific accounting amounts reported by firms in their equity valuation processes (and resulting expected share prices) when a new accounting standard, such as the one on discontinued operations, is introduced in the two competing US and EU markets.

A further avenue for future research could be associated with the examination of the degree of speed with which investors assessing the equity value of EU listed firms are capable of discriminating the specificities of the content of external information based on IFRS 5 as compared to that tied to the original US GAAP equivalent. This would permit to explore the extent to which the investors' community does not rely on previous knowledge of the US GAAP-based statement that has driven the issuance of the new IFRS and is able to recognize potential differences in scope and content between the two convergent standards. Such an additional work would require extending the sample of EU listed firm-years to the period subsequent to first-time adoption of IFRS 5.

8. Conclusions

The aim of this article is to test the value relevance of the income (or loss) from asset or business disposals named as "discontinued operations" to equity investors in two competing markets: US and Europe.

Our claim is that, because of the strong efficiency of their capital markets and the timely adoption of an accounting standard ruling the reporting of discontinued operations (SFAS 144), firms listed in the US market prepare financial statements enabling investors to capture: a) the nil value relevance of any profit-making business divestiture due to its temporary transit in the firm's accounting statements with no impact on future growth prospects; b) the highly significant value relevance of any loss-making business disposal due to the underlying decision to eliminate the effect of the loss previously carried on future firm performance via the associated divestiture.

On the contrary, this does not apply to firms listed in EU markets, whose financial statements prepared under IFRS 5 convey a poor external information that prevents investors from detecting the extent to which a firm's decisions to divest a profit-making versus a loss-making business are differently relevant to future corporate value creation.

Our analysis implies that, when accounting standards are newly adopted by European firms, their knowledge is not spread with the consequence that investors may wrongly interpret the content of the new IFRS based on the equivalent (but not equal) US GAAP standard. More awareness about the new IFRS can be achieved by fostering a wider and more effective circulation of exposure drafts among investors and minimizing the differences between IFRSs and GAAPs. To permit an efficient investment analysis based on neat comparison among financial statements of firms increasingly operating in a global economic system, FASB and IASB should engage in a harmonious convergence process.

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