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## INFLUENCE OF IFRS ON EARNINGS MANIPULATION: EVIDENCE FROM THE EUROPEAN UNION<sup>1</sup>

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### Introduction

International Financial Reporting Standards (IFRS, which include old and revised International Accounting Standards) were selected as an appropriate approach to meeting the increasing capital market demand calling for better comparability and transparency of cross-border companies. IFRS aim to become the one uniform accounting rule worldwide implying an increase in accounting quality because local standards insufficiently meet requirements of necessarily comparable financial statements. In the European Union, Council Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC as the previous legal environment did not satisfactorily ensure a high level of transparency and comparability of financial performance. These Directives' failure was the main reason for mandatory IFRS adoption for all listed companies in the entire European Union. Despite the IFRS benefit (Daske et al., 2006) previous research findings tend to show some limitations of IFRS (Leuz et al., 2000; Burgstahler et al., 2006).

This paper analyzes the influence of IFRS on accounting quality, more precisely on earnings management, by measuring discretionary accruals in EU companies. The research contributes to current literature in two ways. Firstly, the paper considers entire European Union members which represent both the continental code-law tradition (e.g., typically France with weak investor protection) and common-law tradition (e.g., the United Kingdom as a characteristic representative with a strong enforcement system). Secondly, previous research studies mostly considered short time-series

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data which might have caused research reservations and difficulty examining the net influence of IFRS adoption. The sample period is expanded, as this paper considers more than 20 accounting years.

There are contradictory research findings: benefits of IFRS are supported by studies such as Convrig et al. (2007), and on the other hand, e.g. Dao (2005) shows some limits; hence, the net effect of IFRS is still not clear. Our results contribute more empirical evidence from EU companies to the current academic discussion. The paper investigates the influence of IFRS on accounting quality within the period 1992–2013. Discretionary accruals are examined in companies that were using national accounting standards, and later on switched to IFRS in each EU country. Overall, the research found out that IFRS do not increase reporting quality.

## **1. Literature underpinning**

The globalization of international financial markets drives an enhancement in the degree of corporate comparability and transparency of reported financial performance worldwide. Adoption of one uniform set of accounting standards globally has become more popular as an unbiased and reasonable solution to meet the increasing calls. International Financial Reporting Standards (IFRS) have been selected as a relevant approach by European Union members and many other countries. The regulatory movement towards mandatory reporting in accordance with IFRS in the European Union might build an internal capital market operating effectively, efficiently and smoothly to improve the quality of financial reporting. Then there arises a new expectation for parties involved in preparation and analysis of reported financial information (EC Regulation No. 1606/2002).

IFRS profiles are complete for 122 jurisdictions, including G20 countries which have agreed to require or allow adoption of IFRS or have established timelines for IFRS adoption. 101 jurisdictions (83%) require IFRS for most or all domestic publicly traded companies. The remaining jurisdictions which do not require IFRS for all or most domestic listed companies permit IFRS for at least some listed companies (10, e.g. Japan), require IFRS for financial institutions (Uzbekistan and Saudi Arabia), are in the process of IFRS adoption (Indonesia and Thailand) or use national accounting standards (7, e.g. the United States of America, China); Pacter (2014). Moreover, the US Securities and Exchange Commission (SEC) supports international compatibility that allows presentation of financial statements in compliance with IFRS for foreign companies in the USA (SEC, 2007). The widespread acceptance of IFRS underlines their growing significance.

In the European Union, IFRS were adopted mandatorily for publicly traded companies on the regulated market of EU Member States since their securities were admitted to trading on or after January 1 in the year 2005 (EC Regulation No. 1606/2002). European IFRS adoption embodies a crucial milestone in the financial reporting convergence process (Armstrong et al., 2010). The expected benefit of implementing IFRS is to enhance comparability and transparency of financial information and thus increase the quality of financial reporting. Some previous studies (Barth et al., 2008; Daske, 2008; Jeanjean et al., 2008; Callao et al., 2010,) focus on the economic

consequences of implementing IFRS with both confirming and rejecting the hypothesis about the positive influence of IFRS.

Moreover, mandatory adoption of IFRS in many European countries, especially those falling under European continental law, has entailed a significant change in the philosophy of accounting. There has been a shift from a rule-based system to a principle-based system (Callao et al., 2010). The International Accounting Standards Board (IASB) leans toward the principle-based approach which needs managers' as well as auditors' professional judgment to ensure that a financial statement will faithfully reflect the economic substance and transaction. The opposite rule-based accounting approach leaves only slight space for professional judgment (Wüstermann et al., 2005). The principle-based approach may provide more flexibility in interpretation of standards and its enforcement, providing easier earnings manipulation. According to Iatridis et al. (2005) the flexibility in financial reporting may increase the scope for income-smoothing, which could be mitigated by appropriate standardization of accounting practice.

The result of implementing IFRS as one set of accounting standards with a positive impact is approved by a considerable quantity of prior research studies. Ewert et al. (2005) measure the earnings quality by variability of reported earnings and association between reported earnings and market price reaction. Their result states that tighter accounting standards increase earnings quality. Armstrong et al. (2010) indicate that investors in European firms react positively and are aware of the net convergence benefits of IFRS adoption such as improvement in information quality, decrease in information asymmetry, more rigorous enforcement of accounting standards, and convergence. Internationally recognized standards such as IFRS require a high degree of disclosure of financial information. Theoretically, higher disclosure requirements lead to a decline in information asymmetry for investors. The information asymmetry together with the estimation risk may be reduced by one uniform accounting approach because it helps investors to distinguish between lower and higher quality companies.

Lower risk for investors as a consequence of more informed valuation in the equity markets, elimination of international differences in financial reporting, adjustment analysis decreasing the investors' costs, expected increased market efficiency, and removing of barriers to cross-border acquisition are major advantages of IFRS adoption for investors (Ball, 2006). The importance of IFRS may have a positive impact not only on cross-section companies but also for those which switch from local accounting legislation to internationally recognized standards (Daske et al., 2006). Furthermore, accounting diversity could affect the level of cross-border investment (Bradshaw et al., 2004).

Even voluntary IFRS adoption may be beneficial for investors (Convrig et al., 2007), but on the other hand, Jeanjean et al. (2008) criticize the benefits of voluntary IFRS adoption because it suffers from an adverse selection bias based on the assumption that only companies expecting advantages from IFRS adoption would make it. Daske et al. (2006) indicate that both firms which have voluntarily adopted internationally recognized accounting standards (IFRS or US GAAP) and those which are subject to mandatory IFRS or US GAAP adoption have increased their reporting quality signif-

icantly with the IFRS adoption. Those and similar findings tend to show a positive influence of one shared set of standard (IFRS in this case).

Despite the benefits of IFRS, especially the aim to unify accounting rules worldwide, the desired uniformity may remain an elusive achievement due to a lack of adequate changes in other accompanying institutions (Ding et al., 2007). Countries with low demand for information from published financial reports might be reluctant to adopt any common accounting standards that emphasize value relevance (Ali et al., 1999). Those countries lead to use accounting practice producing financial data with low value relevance.

Global accounting language plays merely a partial role in improving comparability of accounting information (Leuz, 2003; Burgstahler et al., 2006). Quality in France reported by Jeanjean et al. (2008) increased after IFRS adoption. IFRS aim to become global accounting standards but the economic and politic environment which drives incentives of preparers and enforcers remains local. Those political and economic factors such as the legal system, strength of the capital market and the enforcement mechanism (Burgstahler et al., 2006) influencing managers' and auditors' incentives are underlying factors of reporting quality (Ball et al., 2003; Ball, 2006).

In addition, the legal environment – in particular, the jurisdiction – should be prepared to implement IFRS. Absence of effective control and infrastructure might be relevant drivers of IFRS failure (Dao, 2007). Cultural differences among countries make it more difficult to fulfill requirements on comparability. One of the key terms in IFRS, the definition of fair value, may be crucial (Ball, 2006) in understandability within cross-border companies. Without compliance with all relevant factors, reporting quality has not been enhanced.

Despite some IFRS limitations (Leuz, 2003; Burgstahler et al., 2006), the IFRS contribute to investors by reducing information costs, especially in the case of cross-border investment (Convrig et al., 2007). Van Tendeloo et al. (2005) found no difference in earnings management behavior between companies reporting under IFRS and German GAAP. The actual net benefit of voluntary and mandatory adoption of IFRS is still an open question. To answer that inquiry is not an easy task regarding past differences in literature findings. The issue itself provides fertile ground for future research.

The accounting quality is largely a determinate of firms' reporting incentives created by market forces and institutional factors rather than by accounting standards (Leuz, 2003; Ball et al., 2003; Ball, 2006). Companies' reporting incentives are different and the strength of enforcement differs considerably across countries. Strong enforcement mechanisms are associated with lower earnings manipulation and higher disclosure quality (Daske, 2008; Eierle et al., 2013); therefore, IFRS themselves may merely mean material changes in reporting quality.

Leuz (2003) indicates that institutional factors such as listing requirements, market microstructure, and enforcement of standards are held constant. The differences in the bid-ask spread and share turnover between US GAAP and IFRS companies are economically small and statistically insignificant. Application of accounting standards depends crucially on company incentives, the enforcement system and the legal environment.

Countries with a weaker legal system and enforcement mechanism have stronger earnings management (Burgstahler et al., 2006) for both public and private firms; thus, a stronger effect of IFRS appears in countries with a stronger power to enforce the rules (Ahmed et al., 2013). Lang (2006) notes that accounting data for cross-listed firms (European/other) show more evidence of earnings management, less evidence of timely loss recognition and a lower association with the share price despite the use of the same accounting standards. Moreover, he suggests that earnings management is more of an issue for cross-listed firms than for US companies because the regulatory and legal environment is less labored for cross-listed companies and the incentives to manage earnings are stronger. Leuz et al. (2003) find that consistent strong protection limits insiders' ability to acquire private control benefits, reducing their incentives to mask firm performance, and they support an endogenous link between corporate governance and reported earnings quality based on data from 31 countries. Apparently, the global accounting debate concentrates too much on the standardization and too little on institutional factors and market forces.

Ding et al. (2007) examined differences between domestic accounting standards (DAS) and International Accounting Standards (IAS) applied in 30 countries. They reported a higher level of absence of regulation in DAS but that requirements of IAS create more room for earnings management, higher synchronicity of stock prices and a decline in firm-specific information to investors. Daske et al. (2006) analyzed the effect of market liquidity, cost of capital and Tobin's  $q$  in 26 countries using a sample of over 3100 companies that adopted IFRS mandatorily. They noted higher market liquidity, decreased costs of capital and an increase in equity valuations around the time of IFRS introduction. Aubert et al. (2012) investigated earnings manipulation in 20 European countries during the pre-IFRS period from 1997 to 2003 and the IFRS period from 2006 to 2008, supporting a positive influence of IFRS. Those and similar studies summarize that benefits for investors from IFRS adoption exceed the expected costs.

In contrast, Callao et al. (2010) gave evidence of increased earnings management after the IFRS adoption. They analyzed earnings management in non-financial firms listed in 11 European countries with a total of 1408 companies by comparing discretionary accruals in the period preceding and immediately after the regulatory change. Nevertheless, they showed the relationship between the accruals and the institutional variables as a negative one for both the periods, which implies that the level of investor protection and legal enforcement used in implementation of the standards helped to keep in check those manipulative practices. Disproving findings associated with IFRS benefits are also provided by Jeanjean et al. (2008), who examined 1146 firms in Australia, France and the United Kingdom. They suggested that uniformity of accounting rules is not sufficient in itself to create a common business language.

Brüggemann et al. (2013) summarized empirical evidence on financial reporting effects and divided them into three categories: compliance and accounting choice studies, accounting properties studies, and value relevance studies. Among them, only one third of the studies mentioned are consistent with the IFRS regulatory objectives. Findings from studies such as Ahmed et al. (2013), Atwood et al. (2011) and Lang et al. (2010) disprove consistency with the IFRS regulatory objectives. Ahmed

et al. (2013) investigated the influence of mandatory adoption of IFRS on 1631 firms in 20 countries and another 1631 companies in 15 countries which did not adopt IFRS. Atwood et al. (2011) examined approximately 2000 firms which mandatorily adopted IFRS and 5000 firms which did not.

Barth et al. (2008) summarized four crucial explanations for the divergent research findings. Firstly, firms preparing to adopt IFRS are likely to make the transition gradually via changing their accounting methods and policies arising from national legislation to come closer to IFRS. Secondly, developing economies lack the infrastructure to enforce the application of IFRS. Thirdly, studies differ in the effectiveness of controls for incentives associated with a firm's use of a particular set of accounting standards and effects of the economic environment. Fourthly, the studies use different metrics, different control variables and draw data from somewhat different time periods. Taken together these facts, reporting quality is hard to measure.

With regard to the studies mentioned, a hypothesis is created as follows: *accounting quality, measured by discretionary accruals, should increase after the IFRS adoption in the European Union*. The alternative hypothesis is: *accounting quality, measured by discretionary accruals, should stay the same or decrease after the IFRS adoption in the European Union*.

## 2. Research sample

The research sample comprises a total of 603 companies listed on the markets in European Union Members representing both the continental code-law tradition and the common-law tradition. The countries examined are listed in Table 1. Those 603 listed companies are all firms for which data were available from the Datastream database and met the requirements specified for the research (as described below).

The analysis covers the period 1992–2013, divided into two sub-periods: before IFRS adoption and after IFRS adoption. That separation reflects two reporting situations. The first situation contains reporting using national accounting standards (“pre” IFRS) and the second one is when company report in accordance with IFRS (“post” IFRS). Data within those two sub-periods are separately investigated for each company based on the accounting standards used.

Companies with a lack of data (less than six years of observations during the “pre” IFRS period for all relevant variables) are excluded from the sample. The total sample, comprising 10,251 firm-year observations (5738 firm-year observations before IFRS adoption and 4513 firm-year observations after IFRS adoption), is presented in Table 1.

The research utilized the Datastream database (Thomson Reuters) to gain the necessary data: *total assets, net sales or revenues, net receivables, property, plant and equipment, price to book value, net cash flow from operating activities and net income before extraordinary items*. In factuality, when a company presents its financial statements under IFRS in the first year, it must restate the financial statements for the previous year under IFRS to ensure comparability. Despite the data restated under the IFRS requirements, those data are not available for extraction from the database. Thus, the first year of IFRS adoption (the transition year) is excluded from the sample.

**Table1: Research sample**

Country	Number of companies	Number of observations	Number of “pre” IFRS observations	Number of “post” IFRS observations
Austria	5	88	45	43
Belgium	22	359	189	170
Bulgaria	3	54	34	20
Croatia	3	56	34	22
Cyprus	7	109	64	45
Czech Republic	3	49	26	23
Denmark	10	182	105	77
Finland	30	511	279	232
France	84	1378	736	642
Germany	52	830	417	413
Greece	6	107	64	43
Hungary	3	44	23	21
Channel Islands	1	19	11	8
Ireland	14	237	139	98
Italy	25	420	236	184
Luxembourg	2	34	19	15
Netherlands	54	919	518	401
Poland	7	103	52	51
Portugal	14	242	137	105
Romania	7	108	56	52
Slovenia	4	66	34	32
Spain	6	99	56	43
Sweden	23	398	218	180
United Kingdom	218	3839	2246	1593
Total	603	10,251	5738	4513

*Source: Datastream database (Thomson Reuters) + author's processing*

It is important to determine the first year of IFRS adoption. We used the subsequent codes for the data type *accounting standards follow*, which Datastream defines as: (1) Local standards; (2) International standards; (3) US standards (GAAP); (4) Common-



wealth countries' standards; (5) EU standards; (6) International standards and some EU guidelines; (7) Specific standards set by the group; (8) Local standards with EU and IASC guidelines; (9) Not disclosed; (10) Local standards with some EU guidelines; (11) Local standards – inconsistency problems; (12) International standards – inconsistency problems; (13) US standards – inconsistency problems; (14) Commonwealth standards – inconsistency problems; (15) EEC standards – inconsistency problems; (16) International standards with some EU guidelines – inconsistency problems; (17) Local standards with some OECD guidelines; (18) Local standards with some IASC guidelines; (19) Local standards with some OECD and IASC guidelines; (20) US GAAP reclassified from local standards; (21) Local standards with a certain reclassification from foreign companies; (22) Other; (23) IFRS.

First year of IFRS application is considered when the code for the data type *accounting standards followed* is (23) IFRS and codes (01), (10), (17), (18), (19) and (20) representing local standards. My sample of companies contains only companies reported firstly under (01), (10), (17), (18), (19) and (20) and secondly presenting their financial statements under IFRS – using the code (23).

### 3. Methodology

Following Jeanjean et al. (2008), the research classifies research designs of earnings management studies into three sections: those using discretionary accruals (e.g. Callao et al., 2010), those using specific accruals (e.g. McNichols et al., 1988) and finally studies using a statistical proportion of earnings to identify thresholds (e.g. Jeanjean et al., 2008).

This study investigates the first mentioned method, discretionary accruals, and analyzes the differences between discretionary accruals before and after IFRS adoption in the European Union. *Accruals are defined as the part of revenues and expenses that do not imply collections and payments, and are indirectly calculated as the difference between profit and operating cash flow* (Callao et al., 2010). *Total accruals are the difference between operating cash flow and income before extraordinary items* (Larcker et al., 2004), thus accruals provide a possibility to manipulate with earnings. Total accruals (TA) consist of discretionary accruals (DA), which are relatively easy to manipulate, and non-discretionary accruals (NDA), which are not. According to the two mentioned expressions, total accruals ( $TA_{it}$ ) are expressed by the mathematical formula:

$$TA_{it} = \Delta Receivables_{it} + \Delta Inventories_{it} - \Delta Payables_{it} - Depreciation_{it}, \quad (1)$$

where  $TA$  is total accruals,  $\Delta Receivables$  is the change in account receivables,  $\Delta Inventories$  is the change in stocks,  $\Delta Payables$  is the change in account payables,  $Depreciation$  is the depreciation and amortization expenses; the subscript  $i$  indicates the particular company and the subscript  $t$  indicates the particular year observation. Due to a problem with a lack of data, total accruals are calculated by Larcker et al. (2004) as difference between cash flow from operating activities and income before extraordinary items calculated for each firm. Both the components of total accruals (discre-



tionary and non-discretionary) are not directly observable, the paper uses the model of Larcker et al. (2004):

$$\frac{TA_{it}}{A_{it-1}} = \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{(\Delta Sales_{it} - \Delta Rec_{it})}{A_{it-1}} + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + \alpha_4 \frac{BM_{it}}{A_{it-1}} + \alpha_5 \frac{CFO_{it}}{A_{it-1}} + \varepsilon_{it}, \quad (2)$$

where  $TA_{it}$  is the total accruals booked by the  $i$ -th firm in the period  $t$ ,  $\Delta Sales_{it}$  is the variation in the sales of the  $i$ -th firm in the year  $t$  compared to the year  $t - 1$ ,  $\Delta Rec_{it}$  is the variation in the account receivables of the  $i$ -th firm in the year  $t$  compared to the year  $t - 1$ ,  $PPE_{it}$  is the total property, plant and equipment of the  $i$ -th firm in the year  $t$ ,  $BM_{it}$  is the book-to-market ratio of the  $i$ -th firm in the year  $t$ ,  $CFO_{it}$  is the current operating cash flow of the  $i$ -th firm in the year  $t$ ,  $\varepsilon_{it}$  is the error term for the  $i$ -th firm in the year  $t$ , and  $A_{it-1}$  represents the total assets of the  $i$ -th firm in the year  $t - 1$ . The denominator  $A_{it-1}$  is used as a deflator to avoid heteroscedasticity.

This model starts from the modified Jones (1991) model and makes improvements to consider likeliness of change in management incentives. The *book-to-market ratio* variable (as a proxy for expected growth of particular firms) reflects the growth of opportunities and the *operating cash flow* variable reflects current operating performance.

Regression coefficients were estimated based on equation (2) for the first period (“pre” IFRS) for each particular company, assuming that non-discretionary accruals are the function of the year-to-year change in sales, PPE, book-to-market ratio and current operating cash flow. After having estimated regression coefficients of equation (2) for “pre” IFRS period, the paper applies those coefficients to calculate predicted discretionary accruals and realized discretionary accruals for both the periods (“pre” IFRS and “post” IFRS). The prediction of discretionary accruals (DA) scaled by lagged total assets is estimated as equation (3)

$$\frac{DA_{it}}{A_{it-1}} = \frac{TA_{it}}{A_{it-1}} - \left[ \alpha_1 \frac{1}{A_{it-1}} + \alpha_2 \frac{(\Delta Sales_{it} - \Delta Rec_{it})}{A_{it-1}} + \alpha_3 \frac{PPE_{it}}{A_{it-1}} + \alpha_4 \frac{BM_{it}}{A_{it-1}} + \alpha_5 \frac{CFO_{it}}{A_{it-1}} \right], \quad (3)$$

where  $DA_{it}$  are discretionary accruals for a particular company for each year and  $a_i$  are estimated values for a particular  $\alpha_i$ . After predicting discretionary accruals and realized discretionary accruals, it can be tested whether manipulation with discretionary accruals is lower or higher after IFRS adoption. Realized discretionary accruals being closer to predicted discretionary accruals implies lower earnings management. Absolute difference between the predicted and realized discretionary accruals is calculated for each particular company for a specific time.

Then means, variances and standard deviations of the absolute differences for each company in the “pre” IFRS period and the “post” IFRS period are calculated. After obtaining those descriptive statistics, values before (test value) and after (comparison value) the IFRS period are compared. If the comparison value is lower than the test value, the difference between the predicted and realized discretionary accruals was lower, resulting in a decrease in earnings manipulation.

The paper classifies companies into two sections: decrease in earnings manipulation, or no significant change including increase in earnings manipulation. Moreover, the results are organized per country to see the IFRS impact on earnings management for each particular member of the European Union.

## 4. Results

### 4.1 Descriptive statistics

Table 1 presents the research sample (numbers of companies and observations), consisting of 603 European companies (10,251 firm-year observations). Table 2 shows the descriptive statistics (means and medians) of the entire sample on the variables: *total assets*, *net sales or revenues*, *net receivable*, *property, plant and equipment (PPE)*, *income before extraordinary items (IBEX)*, *net cash flow from operating activities*, and *book-to-market ratio*.

**Table 2: Descriptive statistics (means and medians)**

	<b>Total assets</b>	<b>Net sales / revenue</b>	<b>Net receivable</b>	<b>PPE</b>	<b>IBEX</b>	<b>Net CF op. act.</b>	<b>BM ratio</b>
Mean	8,933,556	7,136,070	1,553,364	2,639,794	394,545	827,159	0.6505
Median	963,602	828,947	144,989	217,128	32,300	78,692	0.5376

*Source: Datastream database (Thomson Reuters) + author's processing*

In Table 2, the means are visibly higher than the medians, which indicates some extreme values in the sample. For the following procedure, the absolute values of all the variables are scaled by lagged total assets to avoid complications with heteroscedasticity.

### 4.2 IFRS effect on total discretionary accruals

Differences between the realized and estimated discretionary accruals for each company were calculated. The means of the differences before and after IFRS adoption were compared. With a total of 83.4% (503 companies) of the entire sample, there is no change after IFRS adoption with a 95% probability. Only 16.6% (100 companies) of the sample showed a decrease in the earnings management, more precisely an increase in the earnings quality, after IFRS adoption. Table 3 summarizes the results for all the countries.

**Table 3: Numbers of companies with IFRS effect on DA**

	<b>H0</b>	<b>H1</b>	<b>Total</b>
Absolute value	100	503	603
Relative value	16.6%	83.4%	100%

*Source: Datastream database (Thomson Reuters) + author's processing*

Table 3 shows almost no influence of IFRS on earnings management. The discretionary accruals show a lower difference between the estimated and realized values in the 100 companies representing 16.6% of the research sample. Individual countries were analyzed and their results are presented in Table 4.

**Table 4: Numbers of companies with IFRS effect on DA in each country**

Country	H0	H1	Total
Belgium	2	20	22
Denmark	2	8	10
Finland	2	28	30
France	8	76	84
Germany	11	41	52
Ireland	3	11	14
Italy	3	22	25
Netherlands	8	46	54
Portugal	0	14	14
Sweden	2	21	23
United Kingdom	57	161	218
Other countries	2	55	57
Total	100	503	603

*Source: Datastream database (Thomson Reuters) + author's processing*

Tables 3 and 4 present figures for companies with an impact of IFRS on discretionary accruals while the column H0 represents the alternative hypothesis with an improvement in reporting quality. Table 3 shows evidence from European Union members together and Table 4 presents findings separately for each country in absolute values – numbers of companies. Some countries have too low a sample size (lower than 10 firms), implying unfeasibility to generalize the earnings management result for the entire country separately. Those countries are represented in the row “Other countries” in Table 4.

Table 5, which presents findings for each country as a percentages of the total number of observations in each country, provides complete evidence of the research results.

In Belgium, Denmark, Finland and Sweden, the sample contains only two companies out of a total of 22 (Belgium), 10 (Denmark), 30 (Finland) and 23 (Sweden), with an improvement in accounting quality representing more than 90% of the firms (except Denmark). Portugal does not report any case with IFRS benefits. Also, the situation in France shows more than 90% of firms without improvements. Therefore, Belgium, Finland, France, Portugal and Sweden represent strong findings that IFRS do not have to improve accounting quality. Italy and the Netherlands are the countries with more than 10% of cases with an improvement in reported quality. Results for Germany and

Ireland have more than 20% cases with improvement after IFRS adoption. The United Kingdom, as a typical representative with a strong enforcement mechanism, shows an improvement in the financial reporting quality in the highest share of the examined firms.

**Table 5: IFRS effect on DA in each country as percentage**

Country	H0	H1
Belgium	9.1%	90.9%
Denmark	20.0%	80.0%
Finland	6.7%	93.3%
France	9.5%	90.5%
Germany	21.2%	78.8%
Ireland	21.4%	78.6%
Italy	12.0%	88.0%
Netherlands	14.8%	85.2%
Portugal	0.0%	100.0%
Sweden	8.7%	91.3%
United Kingdom	26.1%	73.9%
Other countries	3.5%	96.5%
Total	16.6%	83.4%

Source: Datastream database (Thomson Reuters) + author's processing

Overall, the paper investigated the influence of IFRS on accounting quality measured by the difference between the estimated and realized discretionary accruals. The hypothesis is as follows: *accounting quality, measured by discretionary accruals, should increase after the IFRS adoption in the European Union*. The difference between the estimated and realized discretionary accruals should decrease after IFRS adoption. The findings show only 16.6% of the sample size with IFRS increasing accounting quality. The result suggests that IFRS do not improve accounting quality. Therefore, the research result does not support the idea about an improving effect of IFRS on accounting quality measured by discretionary accruals.

## 5. Discussion and implications for research and practice

International Financial Reporting Standards represent a uniform accounting language with the goal to meet the increasing demand for better accounting information quality, implying higher comparability and transparency of cross-border firms. The worldwide importance of IFRS is proven by more than 100 jurisdictions (including all the European Union members) which have already required or allowed IFRS for publicly traded companies. The improvement in accounting quality across companies has other affecting factors such as the national legal system and managers' incentives which limit

ideal meeting of IFRS goal. Typically, countries with weaker enforcement mechanisms have a higher level of earnings manipulation (Burgstahler et al., 2006), decreasing their reporting quality. The findings do not support IFRS benefits in any EU member but a stronger influence of IFRS appears in countries with strong legal enforcement mechanisms (Ahmed et al., 2013). The result for the United Kingdom, as a country with a strong enforcement system and national UK GAAP closer to IFRS, shows an increase in accounting quality regarding the IFRS adoption; and the result for France, as a typical representative of the code-law tradition with weak investor protection, reveals almost no improvement in earnings management after IFRS adoption. Thus, the enforcement mechanism, the legal system, the national environment and the economic incentives are important in creating an integral capital market.

The result is similar to the findings of Jeanjean et al. (2008), presenting no IFRS benefit in common-law countries (Australia and the UK) and increased pervasiveness of earnings management in France. Despite limitation (Leuz, 2003), IFRS contribute to decreasing information costs, especially for cross-border companies (Corveig et al., 2007), thus bringing benefits for investors.

As the previous research findings differ dependent on used methods, different samples, assumptions and variables, my results found that the prevalence of earnings management did not decline after IFRS adoption. The result is affected by some research limitations. The first one is the relatively low sample size because of a lack of necessary data for more companies. That is why my results for countries with less than 10 companies do not allow an objective evaluation of the entire country. Moreover, the paper uses means to compare discretionary accruals, which is the best option for this purpose, but the mean has some limitations as a descriptive statistic itself.

Due to the difference in the previous results on the influence of IFRS on accounting quality, earnings manipulation and management, no simple uniform verdict exists and the topic is still open for future research. In particular, other factors such as enforcement mechanisms, market access conditions and effectiveness of the legal system are relevant drivers for IFRS success. Therefore, the European Union should also be concerned by the factors mentioned above rather than the convergence process for accounting standards.

## Conclusion

International Financial Reporting Standards (IFRS) have been selected as a uniform accounting language to meet increasing capital market requirements calling for higher transparency and comparability of financial statements, especially for cross-border companies. In the European Union, previous efforts to ensure more efficient market conditions in the form of Council Directives did not work sufficiently. Thus, the European Union decided to adopt IFRS mandatorily for publicly traded companies from 2005. The IFRS implementation by EU members represents an important moment in accounting history. Despite IFRS aim to improve reporting quality bringing benefits for investors, there is evidence (e.g., Leuz, 2003; Burgstahler et al., 2006) that one set of accounting standards alone has some limitations.

This paper investigates the influence of IFRS on earnings management using measurement of discretionary accruals. Earnings management is measured most often by discretionary accruals in previous research (e.g. Callao et al., 2010). The paper examined discretionary accruals in the European Union on a sample representing countries with both the common-law tradition (e.g. the United Kingdom) and the code-law tradition (e.g. France). The sample size consists of 603 firms (10,251 firm-year observations) during the period 1992–2013. In the entire European Union, the earnings management decreased and accounting quality was enhanced in only 16.6% (100 companies) of the examined companies. The other 83.4% (503 companies) do not support the idea about improvement in reporting quality after IFRS adoption. In Belgium, Finland, France, Portugal and Sweden, the accounting quality was enhanced in less than 10% of the examined companies. The results for Germany, Ireland and United Kingdom present an improvement in the reported quality in more than 20% cases.

Overall, this paper contributes to the current accounting debate with more empirical evidence from European Union members. The findings do not suggest that convergence of international accounting standards ensures lower earnings management implying an increase in reporting quality. Hence, the research assumption about an improving effect of IFRS on accounting quality measured by discretionary accruals is not supported. This being stated, the level of other institutional factors such as the national legal system, the enforcement mechanism as well as management incentives are probably more important than accounting standards alone. Therefore, it is suggested that all relevant factors, not only IFRS, should be considered in creating an international competitive environment to ensure improvement in transparency and comparability of financial statements, higher cross-border investments, stronger capital markets and investor protection.

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## INFLUENCE OF IFRS ON EARNINGS MANIPULATION: EVIDENCE FROM THE EUROPEAN UNION

**Abstract:** This paper analyzes the influence of one uniform accounting rule on accounting quality by investigating the effect of IFRS on earnings management. The paper examines whether IFRS adoption is associated with lower earnings manipulation measured by discretionary accruals, a commonly used method. It focuses on European Union membership among countries with both the common-law tradition and the code-law tradition. It investigates a sample of 603 companies (10,251 firm-year observations) during the years 1992–2013. The finding contributes to current accounting debate with the empirical evidence that earnings management did not decline after IFRS adoption. In the European Union itself, the research sample contains a very little portion of companies which show increased reporting quality, more precisely earnings management, on IFRS. Overall, the results do not support the assumption that IFRS have an improving impact on reporting quality and demonstrate that other relevant factors should be considered in creating more efficient capital markets.

**Key words:** accounting quality, discretionary accruals, earnings management, earnings manipulation, international financial accounting standards.

**JEL Classification:** M41, G38