



# The Impact of Mandatory IFRS Adoption on Accrual Anomaly and Earning Conservatism

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## Abstract

This paper investigates the impact of mandatory IFRS adoption on earning management and accounting conservatism by European countries. Using firm-level data of nine European countries within G20 who mandatorily adopted IFRS in 2005, we found that IFRS either increase or decrease accounting conservatism within the sample countries. With Mishkin test to market efficiency at valuation with disaggregated earning components, the results show that the accrual anomaly is not a generalized phenomenon within Europe, especially the Common Law countries. The market seems to be less able to distinguish abnormal accrual from normal accrual estimated by Jones model, which 3(s0 1 473.62 433.03

## **Introduction**

Recent years saw the important accounting regulatory change with EU and all around the world is the mandatory adoption of International Financial Reporting Standard (IFRS). In 2002, the European Union required all member countries to mandatory adopt IFRS from 2005. The main purpose is to make all the data from financial statement comparable. Despite the costly and huge change, till now there is very few researches as to the related economic impact (Ball, 2006).

One of the most discussed topics in accounting research area is the earning management. It is arguable that managers manipulate earnings through accruals. Sloan (1996) first introduced Mishkin test to test the market efficiency in accounting area. They pointed out that the mis-valuation of the stock return is due to the fact that market overweighed the persistence of total accruals. However, Pincus et al (2007) found that accrual anomaly is not a generalised phenomenon. It happens most in Common Law countries, but not in Code Law countries.

While at the same time, it is argued that accounting conservatism, which is defined as asymmetric timeliness of earnings, could mitigate earning management. In general, the earnings conservatism principle is that future bad news is anticipated, whereas future good news is not. However there is very few researches focus on both earning management and accounting conservatism.

The motivation of this research is two folded: the first one is to investigate the possible combination effect of accounting conservatism and earning management. We examine the accounting conservatism as well as the accrual anomaly in the nine European

countries of G20 who have already mandatorily adopted IFRS from 2005, to see the possible impact of the mandatory adoption of IFRS on the market efficiency of valuation model. Secondly following  $\beta$  approach, investigation is conducted as to examine whether the change to IFRS solely can change accounting information environment.

## **Literature Review**

One of the important topics in financial reporting is the extent to which managers manipulate reported earnings, which in term affects the correct pricing of the market stock price. Healy (1985) used accrual-based measurement to test earning management hypothesis; and after this significant researches have been done with the adoption of the accrual-based approach. According to this theory, the accruals are the main difference between earning and cashflows in valuation models. Under accrual accounting system, managers manipulated earning only through accruals rather than cash accounts; therefore the cash should be more persistent than accruals. However, when employing this approach, significant obstacle is associated as to correctly separate total accruals into normal and abnormal accruals. The most frequently used techniques to estimate the normal accruals are the cross-sectional versions of the standard-Jones model or the modified-

residuals capture not only managerial discretion, but also unusual nondiscretionary accruals and unintentional misstatements(Xie, 2001). Peasnell et al. (2000) developed marginal model to detect earning management. Using UK non-financial companies, their results suggested that marginal model is relatively superior to both Jones model and modified Jones model when cash flow performance is extreme.

Another stream of research focused on the market pricing with cash flows, earnings or accruals. In other words, whether the stock price correctly reflects the implications provided by accounting information. Jones (1991) examined whether the market price rationally reflected one-year ahead earnings implications, which incorporated discretionary accrual (hereafter abnormal accrual). She provided empirical evidence that abnormal accruals are positively associated with future profitability. Subramanyam (1996), however, argued that the positive relationship does not necessarily suggest that market rationally prices either earnings or accruals.

After Mishkin(1983) who introduced Mishkin test as a statistical comparison between the market pricing and the forecast pricing, Sloan (1996) employed Mishkin test in investigating the market pricing of total accruals. The empirical evidence from US suggested that the market overprices the persistent of accrual component of earnings. Collins and Hribar (2000) provided evidences to support Sloan's argument that the market overweighed the total accruals of earnings with the same methodology. Xie (2001) pointed out that both Sloan(1996) and Collins and Hribar (2000) did not investigate whether the market mis-pricing is due to normal accrual (non-discretionary accrual) or abnormal accrual (discretionary accrual).



1994 and 2002, the paper cannot cover the period after the adoption of International Accounting Standard.

Recently Byard et al (2011) examined the effect of the mandatory adoption of International Financial Reporting information environment. They found that the impact occurs in those countries with both strong enforcement regimes and domestic accounting standards that differ significantly from IFRS. Hence, the change of accounting standard cannot solely improve the market pricing environment.

However, the earning management behaviour can be mitigated by employing conservative accounting. According to Basu(1997), the accounting conservatism caused by the asymmetric treatment of possible future gains or losses in the relevant profit and loss accounts. This is because that the recognition of future losses is on a timelier basis than that of future gain. Givoly and Hayn (2000) pointed out that giving long enough time scale, accrual based earning will converge to the true economic performance, as the accounting conservatism is the difference of timing and sequencing of recognised earning and the associated cash flows. Lafond and Watts (2008) showed that accounting conservatism manipulation. With the adoption of IFRS from 2005, it is argued that earning management should be controlled and information asymmetric should be improved. Therefore considering the beneficiary aspect of conservative accounting, we would expect that the adoption of conservative accounting would reduce accrual anomaly.



The contribution of our research to the existent literature is three-folded. First, we extend Peasnell et al. (2000) With data spanning from 1990 to 2010, we investigate whether the adoption of IFRS in the Secondly, t to investigate market efficiency of the EU countries. It would be interesting to see whether the change of accounting system solely can change the status of market pricing. Thirdly we would investigate the effect of legal enforcement and accounting system would affect accrual anomaly.

### **Sample**

Our analysis examines 9 European countries in G20, including United Kingdom, France, Germany, Italy, Netherland, Spain, Denmark, Sweden and Switzerland. The sample period span from 1990 to 2010. We start from the point that to include all the population of firms on the *Datastream* Live and Dead stock files with the accounting data needed by Jones model, Peasnell et al (2000) s model and Mishkin s test. We hereby exclude all financial firms as their different financial reporting environment and the way accruals are calculated and recorded. We also exclude those companies for which returns and scaled accruals lie outside the five and 95% percentiles.

All the accounting data collected are at the end of fiscal year, except that the stock return is collected and calculated three month after the fiscal year to allow the information to be incorporated into the stock price.

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## Empirical Result

### 1. Detect Accounting Conservatism

The following models proposed by Basu (1997) will be estimated to investigate accounting conservatism:

$$+ \quad (1)$$

$$+ \quad (2)$$

$$+ \quad (3)$$

where:

Net income: is the net income

CFO: operating cash flow

Accrual: the different between net income and operating cash flow<sup>1</sup>



it is more or less the same as captured by the difference between two from equation (1) and (2).

In Table 2 and Table 3, we listed the results with sub-sample period from 1990 to 2004 and the sub-sample period from 2005 to 2010. It would be interested to see whether the mandatory adoption of IFRS in EU from 2005 will have impact on the accounting conservatism or not. The results suggest that there is no difference between the period before and after the mandatory adoption of IFRS. The more conservative accounting standard implied by IFRS does not seem to increase the earning conservatism in financial reporting.

As Peasnell et al (2000) suggested, the early recognition of future bad performance may be realised through non-operating as well as operating accruals. Therefore the following model will be estimated to detect possible accounting conservatism:

(4)

where:

is the change in net sales

is property, plant, and equipment defined by IFRS

Significant coefficient of or suggests accounting conservatism. The results are listed in Table 4, among which Panel A shows the results of the whole sample period and the sub-sample periods before and after the mandatory adoption of IFRS in 2005. The results suggest that not all the sample countries have accounting conservatism. Among all

the sample countries, United Kingdom has the highest coefficient of earning conservatism.





IFRS on earning management. For sample period before 2005, we estimate the following models:



Ownership concentration is the median of the percentage of common shares owned by the three largest stockholders in the ten largest privately owned nonfinancial firms, developed by La Porta et al. (1998). The importance of equity market is collected from La Porta et al. (1997), and Anti-director rights index is collected by La Porta et al. (1996). And for the sample after 2005, we dropped out independent variables as IFRS difference and Accrual Index.<sup>3</sup>

The results are listed in Table 7. Panel A listed the results for the sample period before 2005. It is interesting to see that although some of the country characteristics are not significant, while when included, the earning management disappeared. The Importance of Equity Market is significant in all the four models.

shows that the accrual anomaly does not exist in Common law countries in the EU as well as in the UK. The further investigation with disaggregation of total accrual into normal accrual and abnormal accrual shows that the market cannot distinguish abnormal accrual from normal accrual. The mispricing of future earning based on cash flow and

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**Table 1:**

**Table 1 (continued)**

**Table 2: Earning Conservatism detection sample period 1990-2004**

		Net Income Model (1)	CFO Model (2)	Difference btw (1) and (2)	Accruals Model (3)	No of Observations
<b>Denmark</b>	<b>RD</b>	0.006	-0.0087		0.01	1263
	<i>t-stat</i>	(0.78)	(-0.93)		(1.23)	
	<b>Return</b>	0.020	0.032**		-0.007	
	<i>t-stat</i>	(1.43)	(1.98)		(-0.49)	
	<b>Return*RD</b>	0.095***	0.048**	0.047	0.022*	

**Table 2 (continued)**

		Net Income Model (1)	CFO Model (2)	Difference btw (1) and (2)	Accruals Model (3)	No of Observations
<b>Spain</b>	<b>RD</b>	-0.0289	-0.041		-0.004	58
	<i>t-stat</i>	(-1.08)	(-0.87)		(-0.12)	
	<b>Return</b>	0.0477	0.1525*		-0.0863	
	<i>t-stat</i>	(0.98)	(1.78)		(-1.31)	
	<b>Return*RD</b>	-0.0641	-0.2217	0.1576	0.0202	
	<i>t-stat</i>	(-0.83)	(-1.63)		(0.19)	
		0.08	0.12		0.07	
<b>Sweden</b>	<b>RD</b>	-0.011	-0.0178		-0.015	1863
	<i>t-stat</i>	(-0.72)	(-1.24)		(-1.45)	

**Table 3: Earning management detection sample period 2005-2010**

		<b>Net Income Model (1)</b>	<b>CFO Model (2)</b>	<b>Difference btw (1) and (2)</b>	<b>Accruals Model (3)</b>	<b>No of Observations</b>
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**Denmark**



**Table 3(continued)**

		Net Income Model (1)	CFO Model (2)	Difference btw (1) and (2)	Accruals Model (3)	No of Observations
<b>Spain</b>	<b>RD</b>	-0.001	-0.0085		0.005	502
	<i>t-stat</i>	(-0.19)	(-0.72)		(0.56)	
	<b>Return</b>	0.0196	0.0086		-0.009	
	<i>t-stat</i>	(1.43)	(0.45)		(-0.58)	

**Table 4: Earning Management Detection**

**Panel A: Whole sample period (1994-2010)**

<b>Denmark</b>		0.050***	-0.001	0.019**	0.033**	-0.04***	0.05
	<i>t-stat</i>	(4.95)	(-0.09)	(2.36)	(2.33)	(-2.29)	
<b>France</b>		0.02	0.010	0.018	0.033	0.001	0.0008
	<i>t-stat</i>	(0.64)	(0.18)	(0.82)	(0.76)		

**Panel B: sample period before mandatory adoption of IFRS (1994-2004)**



**Table 5: Mishkin Test of the Market Efficiency-Earning Components-By countries**

**Panel A: Mishkin Test of the components of earning (1994-2010)-by countries**

Country	n					
Demark	1297	0.5209	0.8001	0.4235	0.6489	

**Table 6: Mishkin Test of the Market Efficiency-with Accrual Components**

**Panel A: Mishkin Test of the components of accrual (1994-2010)-by countries**

<b>Country</b>	<b>n</b>							
<b>Demark</b>	1297	0.5376	0.8283	0.4751	0.1232	-0.1495	0.6987	

**Table 7: Earning Management Controlled for Country Characteristics**

**Panel A: sample period (1994-2004)**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
<b>RD</b>	-0.009**	-0.011	-0.0031	0.0048
	(-2.31)	(-1.25)	(-0.37)	(0.65)

**Return**

**Panel B: sample period (2004-2010)**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
<b>RD</b>	-0.12**	-0.024***	0.0004	-0.0013
	(-1.90)	(-3.87)	(0.10)	(-0.38)
<b>Return</b>	0.007	-0.0054	-0.005	0.0392***
	(0.74)	(-0.56)	(-0.70)	(11.42)
<b>PPE</b>				0.0139**
				(2.34)
<b>Return*RD</b>	0.151***	0.1214***	0.019**	-0.027***
	(12.83)	(10.14)	(2.10)	(-6.31)
<b>PPE*RD</b>				0.0067
				(0.84)
<b>Law Enforcement</b>	-0.008	-0.0103*	-0.0101**	-0.011**