The quantity, applicability and compliance of financial instruments

reporting under International Financial Reporting Standard 7

Financial Instruments: Disclosures

Abstract

We examine the relationship between, and determinants of, quantity, applicability and

compliance with financial instruments disclosures. Size, derivatives value and financial

instruments usage are all positively related to the applicability of IFRS 7. We investigate whether

the level of compliance and applicability contribute to the variability in the quantity of

disclosures. Using regression tests, and controlling for voluntary incentives to disclose, we find

that these factors do not contribute. However, we find that the incentives to voluntarily disclose

are significantly more important when applicability levels are low.

Key words: disclosures; quantity; financial instruments

1. Introduction¹

There is a vast literature devoted to the question 'what incentivizes organizations to reveal information', but the theories are predominately developed in an unregulated setting.² Despite claims in seminal disclosure reviews (e.g. Verrecchia, 2001) that managerial discretion is limited in mandatory disclosures decisions, empirical studies consistently find incomplete compliance (Tsalavoutas, 2011), probably as a result of imperfect enforcement (Hope, 2003; Brown and Tarca, 2005). In the absence of an established theory of compliance (Glaum et al., 2013), this research borrows from the voluntary disclosure setting to explain the determinants of compliance.

Motivated by a research vacuum, our core research objectives are: to explore the managerial disclosure decision whether to comply with mandatory reporting requirements; and, to better understand voluntary incentives in aggregate disclosure. It is important to study mandatory disclosure in order to appreciate the effectiveness of accounting regulations and the potential benefits of improved disclosure and enforcement mechanisms. Equally, if higher compliance does not lead to richer and more informative disclosures relative to what the organization would disclose regardless, expending additional resources on compliance and enforcement might be considered an inefficient use of resources.

Evidence indicates that both voluntary and mandatory disclosures are useful to users (e.g. Abraham et al., 2012) which further justifies their simultaneous study. Studies have documented a higher quantity of information presented in the annual report as a result of increased mandatory disclosures (Roulstone, 1999; Dunne et al., 2004; Chalmers, 2001; Miihkinen, 2012; Bischof, 2009). Yet, the role of materiality and applicability (where 'applicability' refers to an

¹ The extended, more complete version of this paper is available on request. ² For a recent theoretical review see Beyer *et al.* (2010).

organization's required disclosures) of certain mandated requirements in driving the level of disclosure has not been studied in the context of compliance; although there is support to the rationale that this is an important additional factor (Heitzman *et al.*, 2010).

The area of financial instruments reporting is a particularly inviting context to study these three dimensions: compliance, applicability and quantity. Firstly, financial instruments information is important to understanding an entity's position and performance. Evidence suggests that the disclosures are informative (Campbell *et al.*, 2011; Seow and Tam, 2002; Wang *et al.*, 2005). Secondly, mandatory financial instruments disclosures are extensive and allow scope for considerable variability between reporting entities (Bischof, 2009; Lopes and Rodrigues, 2007; Woods and Marginson, 2004; Chalmers and Godfrey, 2004; Chalmers, 2001). No other reporting area has such an extensive depth and breadth of requirements. While previous studies have mostly focused on risks disclosure (e.g. Chalmers and Godfrey, 2004; Linsley and Shrives, 2006; Abraham and Cox, 2007; Dobler *et al.*, 2011) our focus is on more comprehensive disclosure of financial instruments.

Our study considers a sample of 58 non-financial FTSE 100 firms' IFRS 7 disclosures during the first-year of adoption. We examine the relationship between compliance, applicability and quantity of disclosures in the context of financial instruments disclosures required by IFRS 7. Principally, we study the determinants of applicability and compliance levels and whether they contribute to the expansion of narrative disclosures using regression tests.

Our study contributes to the disclosure literature by providing evidence that the variability in the amount of disclosed information is *not* associated with the variability in compliance or applicability. Thus, in contrast to conclusions from prior work, mandatory reporting itself does *not* appear to force firms to disclose more on average. Furthermore, we

build on the work of Heitzman *et al.* (2010) by providing additional evidence on the role of applicability and materiality on the quantity of disclosures. Heitzman et al. (2010) and looked at the decision to disclose a single item, while we look at it in the context of multiple items. They assumed that the level of advertising to sales acts as a proxy for an unobserved level of materiality, while we compute applicability directly and study its determinants. When applying an accounting standard, there is a two-phase identification process: first, does the item requiring disclosure exist?; and second, is it material?

While we confirm the importance of absolute size and risk exposure for applicability, we also find that their marginal effect on the quantity of disclosure goes well beyond their effect on quantity through materiality and applicability. Therefore, the effect of materiality on disclosure-decisions studied through its determinants may be overstated in Heitzman *et al.* (2010). Thus, even when disclosures are mandated, quantity is still a reasonable measure of voluntary disclosure practices.

2. Hypothesis development

We propose that the more complex the financial operations of a firm are, the greater the likelihood of higher applicability levels. In turn, the relative value of financial instruments to total assets, and the absolute value of the assets, are likely to be associated with the complexity of the operations of the company. As firms are required to disclose considerable information related to risk per IFRS 7, then in line with previous statements we propose that it is likely that the applicability levels will also vary according to levels of risk exposure. A further element of the applicability decision is related to materiality. The definition of materiality emphasizes the role of relative (compared to overall activity) size of the item as a criterion for disclosure, but in

defining materiality, auditors are also concerned with the absolute size of the item (Heitzman *et al.*, 2010). This leads to our next hypothesis:

H1a: The overall applicability level of requirements of IFRS 7 increases in line with the relative size of financial instruments, total size of the company and risk exposure of the company.

The complexity of the operations and materiality thresholds used to justify H1a may be highly correlated with the level of information asymmetry. More complex operations are, by definition, more obscure for outsiders to observe. We introduce the following hypothesis for comparison purposes reflecting the factors affecting the compliance hypotheses (detailed below).

H1b: The overall applicability of IFRS 7 is not affected by the net benefits to voluntarily disclose the information, controlling for the relative size of financial instruments, total size of the company and risk exposure of the company.

In line with the compliance literature which addresses the managerial disclosure decision, we expect that incentives to voluntarily disclose will play a role in explaining the variability in compliance.

H2a: Compliance with IFRS 7 requirements is related to the increasing net benefits to voluntarily disclose the information.

Controlling for factors associated with the net benefits of disclosure, there is no reason to think the applicability levels themselves should affect the level of compliance, defined as the proportion of applicable items.

H2b: The compliance with requirements of IFRS 7 is not affected by the overall applicability levels.

Heitzman *et al.* (2010) and subsequent studies find that the proxies for materiality are positively related to the disclosure decision. We extend this argument to test how the level of applicability affects the amount of disclosure. In a full compliance environment, one would expect that an organization that *needs* to disclose more items because of their applicability, would disclose more in volume terms.

H3a: The quantity of disclosure is likely to increase in line with levels of applicability and compliance.

Heitzman *et al.* (2010) find that the voluntary incentives to disclose are more important when materiality thresholds are low, and *vice versa*. Even if the information is not material, organizations still disclose it because of the positive net benefits of disclosure. Extended to our setting, if the applicability levels are low but the company has strong voluntary incentives to disclose, it may disclose more about the information applicable and perhaps voluntarily disclose some information above and beyond the mandatory requirements. If the applicability levels are high, we should expect that the correlation of quantity with applicability to also be high.

H3b: The quantity of disclosure is likely to proportionately higher when applicability levels are low than when applicability levels are high.

3. Research design and methods

3.1. Sample

The study reviews the IFRS 7 disclosures for the FTSE 100 non-financial firms' for years beginning on or after 1 January 2007. In total, results related to 58 companies' annual reports are reported. We exclude financial firms because they typically build their business models around holding, exchanging and trading financial instruments as opposed to using them for managing straightforward transaction and economic risk exposure.

3.2 Measurement of applicability, compliance and quantity variables

We take the number of words as the measure of quantity.³ As this measure is right-skewed, we use natural logarithm of number of words in our regression tests (Miihkinen, 2012). To measure compliance and applicability, a checklist was completed which comprised 133 separate requirements.⁴ The scoring index was unweighted and dichotomous. Information appropriately disclosed and required was marked as '1', information not disclosed but required '0', and information not required 'N/A'. Our applicability measure (APPL) is then the proportion of total IFRS 7 requirements applicable and compliance measure (COMPL) is proportion of IFRS 7 requirements applicable and appropriately met.⁵

3.3 Research design

To test hypotheses we run the following regression models:

H1a:
$$APPL_i = \alpha_0 + \beta_1 FI_i + \beta_2 SIZE_i + \beta_3 RISKEXP_i + \varepsilon_i$$
,

H1b: $APPL_i = \alpha_0 + \beta_1 FI_i + \beta_2 SIZE_i + \beta_3 RISKEXP_i + \sum_{j=4}^n \beta_j NBENDISCL_{j,i} + \varepsilon_i$,

H2a: $COMPL_i = \alpha_0 + \beta_1 FI_i + \beta_2 SIZE_i + \beta_3 RISKEXP_i + \sum_{j=4}^n \beta_j NBENDISCL_{j,i} + \varepsilon_i$,

H2b: $COMPL_i = \alpha_0 + \beta_1 APPL + \beta_2 FI_i + \beta_3 SIZE_i + \beta_4 RISKEXP_i + \sum_{j=5}^n \beta_j NBENDISCL_{j,i} + \varepsilon_i$,

 $QUAN_i = \alpha_0 + \beta_1 APPL_i + \beta_2 COMPL_i + \beta_3 FI_i + \beta_4 SIZE_i + \beta_5 RISKEXP_i$

H3a: $+ \sum_{j=6}^n \beta_j NBENDISCL_{j,i} + \varepsilon_i$,

³ We note that in the context of quantity, when the mandatory disclosures exist, it is virtually impossible to distinguish any voluntary component from the mandatory one. The quantity thus becomes an aggregate measure of disclosures.

⁴ Available on request. IFRS 7 has 34 balance sheet disclosure requirements, a further 10 relate to the income statement and equity, 49 relate to risk, 2 relate to adoptions and exemptions and there are 38 other requirements. ⁵ A common problem with content analysis is the reliability of the results (Krippendorff, 2004). To help mitigate this, inter-coder reliability testing was undertaken for ten of the companies to ensure the results were robust. The Kappa coefficients ranged from κ =0.97 to κ =1.00 thus indicating high levels of accuracy, stability and reproducibility.

where APPL is applicability level, COMPL is compliance, FI is relative size of financial instruments, SIZE is the total size of the organization, RISKEXP is risk exposure of the company and NBENDISCL is a list of variables representing potential benefits and costs of voluntary disclosure.

Relative size of financial instruments, total size of the firm, and the firm's risk exposure are all factors associated not only with applicability levels but also with the potential net benefits of disclosure. Therefore, these variables are considered in our models to test H2a, H2b, H3a and H3b as the proxies for net benefits of disclosure. To test H3b we use the same model as in H3a, but applied to observations below and above the median of APPL separately.

3.3.1 Independent variables in the regression tests

To select the variables reflecting the net benefits of voluntary disclosures (NBENDISCL), we relied on the extant body of empirical disclosure work. We initially selected ten variables. We eliminate insignificant variables to obtain a more parsimonious model and increase the power of our regression tests, given the small sample size. The final model includes volume of shares traded, number of analysts following the firm, gearing and current ratio as proxies for the net benefits of disclosure (NBENDISCL).⁶ These variables as well as the determinants of applicability (FI, SIZE and RISK) are defined in Table 1. We use the sum of total derivative assets and liabilities relative to size as the proxy for the firm's risk exposure (RISKEXP). This is because derivatives are positively associated with the exposure of various financial risks - interest rate risk, forward exchange risk, commodity risk, and so forth - before hedging is taken

_

⁶ The initial set of variables proxying for information asymmetry, agency costs, proprietary costs and litigation costs that determine net benefits of disclosure includes: volume of shares traded, volatility of stock price, equity issuance, number of analysts following the firm, number of news items about the firm in the press, leverage, current ratio, profitability and indicator variable for oil and gas and mining industry. Details of the procedure to eliminate the variables are available on request.

into account (Bartram *et al.*, 2011), They are also directly related to one of the financial items that is required to be disclosed.

4. Empirical results

4.1 Descriptive statistics

Table 2 presents descriptive statistics of the main variables. The mean level of applicability (APPL) is 58.3%, which is similar to its median. The firm with the highest applicability score needs to meet about three-quarters (99 requirements). The Compliance level is high (mean: 94.6%) which, after adjusting for applicability, shows that the average firm does not comply with four of IFRS 7's requirements. The standard deviation of compliance is 5.8% suggesting low variability. The level of compliance is higher than in comparable studies. Explanations for this high compliance rate might be that our sample comprises the largest firms, in a developed stock market, with strong corporate governance mechanisms, alongside managerial experience of applying IAS' 32 and 39 and in a time of heightened anxiety given the challenging economic context (financial crisis). The average number of words (quantity) is 2,993 (min: 1,085; max: 7,542; standard deviation: 1,374). This highlights a considerable variation in quantity between firms.

4.2 Tests of hypotheses

Table 3 presents the regression results for applicability on potential factors affecting it: FI, SIZE and RISKEXP. Multivariate regressions (model 4) demonstrate that these factors explain 56% of the variability in applicability. Adding other variables that proxy for net benefits of disclosures in model 5, does not change the results for SIZE, RISKEXP and FI. These results are consistent with H1a, when SIZE and RISKEXP are considered and not consistent when FI is considered.

 7 This is obtained by multiplying number of requirements (133) with mean applicability (0.583) and non-compliance (1 – 0.946).

Net benefits of disclosure in general do not contribute to explaining variability in APPL, consistent with H1b.

Table 4 presents the regression results for compliance on its potential determinants including APPL. We find that variables proxying for net benefits of disclosure are not related to compliance (Model 1). This is unsurprising given the descriptive statistics pertaining to COMPL (i.e. high compliance, low standard deviation). In our univariate regressions (Model 2), APPL is not associated with COMPL and explains only 3% of variability in COMPL. The results remain virtually the same when APPL and net benefits of disclosure are put together in Model 3. Therefore we can reject H2a related to the determinants of compliance but not H2b related to the relation between APPL and COMPL.

Table 5 presents results on the association of quantity with the net benefits of those disclosures, applicability and compliance. Net benefits of disclosures that include FI, SIZE and RISKEXP in Model 1 explain 47% of variability in QUAN and all are statistically significant with the signs as predicted. Secondly, we regress QUAN only on APPL and COMPL. Both coefficients on APPL and COMPL are positive and significant at the 5% level. APPL and COMPL on their own explain around 26% of variability in QUAN. To control for the voluntary incentives to disclose we combine variables for net benefits of disclosures, APPL and COMPL in Model 3. Both APPL and COMPL coefficients significantly reduce in size and become statistically insignificant from zero. While the full model explains 49% of the variability in QUAN, model 3 is not superior to model 1 in terms of adjusted R^2 (which in both is around 40%). We can, therefore, reject H3a.

Table 6 presents results for determinants of quantity across firms below and above median of APPL. The results are in line with H3b. Regression for low applicability firms

explains 80% of variability in QUAN, with RISKEXP, VOLUME and CR being statistically significant at the 5% level and AF and COMPL at the 10% level. By contrast, the same specification explains only 38% of the variability in QUAN for high applicability firms, with none of the coefficients being significant. Out of the significant coefficients for low applicability firms, we find that RISKEXP and VOLUME have statistically higher coefficients than for high APPL firms, while the difference in CR coefficient is not statistically significant. Furthermore, the model that allows for non-linearity in coefficients between low and high applicability firms is superior to its linear version. The R^2 is 66% relative to R^2 in Table 5, model 3 of 49%. Accounting for differences in number of regressors, the adjusted R^2 of the expanded model is 10 percentage points higher than the simple one (49% versus 39%). This finding is consistent with Heitzman *et al.* (2010).

5. Summary and conclusions

This study examines the relationship between quantity, applicability and compliance with financial instruments disclosures. We completed a full IFRS 7 compliance review for 58 non-financial firms in the FTSE 100 for years commencing on or after 1 January 2007. We found comparably high levels of compliance. We regress quantity on applicability and compliance levels, and compliance on applicability, controlling for net benefits of disclosure. We do not find statistically significant relation of applicability and compliance with quantity of disclosure. Given the overall high compliance levels, it is unsurprising that we are not able to detect any significant determinant of compliance in our regression tests.

We also consider the determinants of applicability and compliance with financial instruments reporting. We find a strong positive relation between size and the level of total derivative assets and liabilities to total assets with applicability, but not so for relative size of

financial instruments. These three variables explain about 56% of the variability of applicability in our sample. As expected, other reporting incentives do not contribute a great deal to the explanation of applicability scores. Variables proxying for net benefits of disclosure explain about 47% of the variability in quantity of disclosure. However, these effects are non-linear in the level of applicability. For the sample of companies below the median of applicability score, the marginal effect of voluntary disclosure incentives is much higher than the effect above the median, and the marginal explanatory power of voluntary disclosure incentives above materiality determinants is much higher. Relative size of derivative holdings, volume of trade, number of analysts following the firm and current ratio remain significant only in low applicability firms where they explain around 80% of variability in quantity (relative to only 38% in high applicability firms), suggesting that they affect the quantity of disclosures other than through an applicability threshold effect.

References

- Abraham, S., & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *British Accounting Review*, 39(3), 227-248.
- Abraham, S., Marston, C., & Darby, P. (2012). *Risk reporting: Clarity, relevance and location*. The Institute of Chartered Accountants of Scotland, Edinburgh.
- Bartram, S.M., Brown, G.W. & Conrad, J. (2011). The effects of derivatives on firm risk and value. *Journal of Financial and Quantitative Analysis*, 46 (4), 967-999.
- Beyer, A., Cohen, D. A., Lys, T. Z., & Walther, B. R. (2010). The financial reporting environment: Review of the recent literature. *Journal of Accounting & Economics*, 50(2), 296-343.
- Bischof, J. (2009). The Effects of IFRS 7 Adoption on bank disclosure in Europe. *Accounting in Europe*, 6(2), 167-194.
- Brown, P., & Tarca, A. (2005). A commentary on issues relating to the enforcement of International Financial Reporting Standards in the EU. *European Accounting Review*, *14*(1), 181-212.
- Campbell, J. L., Chen, H., Dhaliwal, D. S., Lu, H. M., & Steele, L. B. (2011). The information content of mandatory risk factor disclosures in corporate filings. *Review of Accounting Studies*, 1-60.
- Chalmers, K. (2001). The progression from voluntary to mandatory derivative instrument disclosures—look who's talking. *Australian Accounting Review*, 11(23), 34-44.
- Chalmers, K., & Godfrey, J.M. (2004). Reputation costs: the impetus for voluntary derivative FI reporting. *Accounting, Organizations and Society*, 29(2), 95-125.

- Dobler, M., Lajili, K., & Zéghal, D. (2011). Attributes of corporate risk disclosure: An international investigation in the manufacturing sector. *Journal of International Accounting Research*, 10(2), 1-22.
- Dunne, T., Helliar, C., Power, D., Mallin, C., Ow-Yong, K.E.A.N., & Moir, L. (2004). The introduction of derivatives reporting in the UK: A content analysis of FRS 13 disclosures. *Journal of Derivatives Accounting*, *I*(02), 205-219.
- Gebhardt, G. (2012). Financial instruments in non-financial firms: what do we know? *Accounting and Business Research*, 42 (3), 267-289.
- Glaum, M., Schmidt, P., Street, D. L., & Vogel, S. (2013). Compliance with IFRS 3-and IAS 36-required disclosures across 17 European countries: company-and country-level determinants. *Accounting and Business Research*, 43(3), 163-204.
- Heitzman, S., Wasley, C., & Zimmerman, J. (2010). The joint effects of materiality thresholds and voluntary disclosure incentives on firms' disclosure decisions. *Journal of Accounting and Economics*, 49(1), 109-132.
- Hope, O. K. (2003). Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: An international study. *Journal of Accounting Research*, 41(2), 235-272.
- International Accounting Standards Board (2005). *International Financial Reporting Standard 7 Financial Instruments: Disclosures*.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. 2nd edition, Sage Publications, Beverley Hills.
- Linsley, P. M., & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *British Accounting Review*, *38*(4), 387-404.
- Lopes, P.T., & Rodrigues, L.L. (2007). Accounting for FIs: An analysis of the determinants of disclosure in the Portuguese stock exchange. *International Journal of Accounting*, 42(1), 25-56.
- Miihkinen, A. (2012). What Drives Quality of Firm Risk Disclosure?: The Impact of a National Disclosure Standard and Reporting Incentives under IFRS. *International Journal of Accounting*, 47(4), 437-468.
- Roulstone, D. T. (1999). Effect of SEC financial reporting release No. 48 on derivative and market risk disclosures. *Accounting Horizons*, 13(4), 343-363.
- Seow, G., & Tam, K. (2002). The Usefulness of Derivative-Related Accounting Disclosures. *Review of Quantitative Finance and Accounting*, 18(3), 273-291.
- Tsalavoutas, I. (2011). Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal? *Advances in Accounting*, 27(2), 390-405.
- Verrecchia, R. (2001). Essays on Disclosure. *Journal of Accounting and Economics*, 32(1-3), 97-180.
- Wang, L., Alam, P., & Makar, S. (2005). The value-relevance of derivative disclosures by commercial banks: A comprehensive study of information content under SFAS Nos. 119 and 133. *Review of Quantitative Finance and Accounting*, 25(4), 413-427.
- Woods, M., & Marginson, D.E.W. (2004). Accounting for Derivatives: An Evaluation of Reporting Practice by UK Banks. *European Accounting Review*, 13(2), 373-390.

Table 1
Explanatory Variables Source and Measurement

<u>Variables</u>	Information source	<u>Description</u>				
Panel C: Applicability, con	Panel C: Applicability, compliance and quantity variables					
Applicability (APPL)	Annual report	Number of applicable IFRS 7 requirements/Total IFRS 7 requirements (133)				
Compliance (COMPL)	Annual report	Number of IFRS 7 requirements appropriately met/Number of applicable IFRS 7 requirements				
Quantity (QUAN)	Annual report	Natural logarithm of number of words related to financial instruments				
Panel C: Determinants of a	applicability					
Financial instruments relative size (FI)	DataStream	(Cash and cash equivalents + Trade receivables + Other investments +Trade payables + Long Term Debt + Short Term Debt & Current Portion of Long Term Debt)/Total assets				
Size (SIZE)	Annual report	Natural log of total assets				
Risk (RISKEXP)	Annual report	(Derivative assets + Derivative liabilities)/Total assets				
Panel B: Net benefits of dis	closure (NBENDISCL)					
Volume of shares traded (VOLUME)	DataStream	Number of shares traded within the year / Number of shares in issue at beginning of the year				
Number of analysts following the firm (AF)	Thomson One Banker	Reported news items / number of analysts following				
Leverage (LEV)	DataStream	(Long Term Debt + Short Term Debt & Current Portion of Long Term Debt) / (Long Term Debt + Short Term Debt & Current Portion of Long Term Debt + Common Equity)				
Current ratio (CR)	DataStream	Current assets / Current liabilities				

Table 2
Descriptive Statistics

	Mean	Std. Dev.	Min.	Median	Max.		
Panel A: Initial and extended decomposition of ΔNOA							
APPL	0.583	0.065	0.470	0.580	0.740		
COMPL	0.946	0.058	0.690	0.960	1.000		
QUAN (as absolute)	2993	1374	1085	2683	7542		
QUAN (as ln)	7.906	0.447	6.989	7.894	8.928		
Panel B: Explanatory variables							
FI	0.529	0.221	0.148	0.521	0.988		
SIZE	9.030	1.147	7.090	8.970	11.820		
RISKEXP	0.035	0.050	0.000	0.015	0.212		
VOLUME	2.107	1.219	0.030	1.855	8.130		
AF	21.069	5.809	11.000	21.000	37.000		
LEV	0.373	0.246	0.000	0.327	1.172		
CR	1.343	1.261	0.280	1.055	7.940		

Notes:

The sample consists of 58 observations. All variables are defined in Table 1.

Table 3
Regression Results on Determinants of Applicability

		Table 4	
Regression	Results or	Determinants of	Compliance

	(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)
Intercept	0.584 ** (25.83)	0.241 ** (4.67)	0.560 ** (61.94)	0.257 ** (4.68)	0.298 (4.32)	Intercept	0.889 ** (9.78)	0.851 ** (12.48)	0.891 ** (8.28)
FI	-0.002 (-0.05			0.020 (0.73)	-0.014 (-0.39)	APPL		0.164 (1.41)	-0.007 (-0.03)
SIZE		0.038 ** (6.66)		0.033 ** (5.99)	0.036 ** (5.22)	FI	-0.033 (-0.71)		-0.034 (-0.70)
RISKEXP			0.666 ** (4.46)	0.438 ** (3.50)	0.395 ** (3.15)	SIZE	0.013 (1.47)		0.014 (1.20)
VOLUME					-0.005 (-0.87)	RISKEXP	-0.065 (-0.39)		-0.062 (-0.34)
AF					-0.002 * (-1.90)	VOLUME	-0.006 (-0.79)		-0.006 (-0.78)
LEV					0.033 (1.02)	AF	-0.003 (-1.61)		-0.003 (-1.55)
CR					-0.001 (-0.13)	LEV	0.055 (1.31)		0.055 (1.29)
R^2 Adjusted R^2	0.000 -0.018	0.442 0.432	0.262 0.249	0.561 0.536	0.605 0.550	CR	0.001 (0.12)		0.001 (0.12)
We run regres						R^2 Adjusted R^2	0.125 0.002	0.034 0.017	0.125 -0.018

We run regression of the applicability (APPL) on its determinants. In the first three models we run univariate regressions. In the fourth model we run the regression to test the hypothesis H1a and in fifth model to test the hypothesis H1b. The coefficients with associated *t*-statistic (in parentheses) are reported. All variables are defined in Table 1.

We run regression of the compliance (COMPL) on its determinants. In the first model we run the regression to test the hypothesis H2a. In the second model we test for univariate relation between COMPL and APPL. In the third model we test the hypothesis H2b. The coefficients with associated *t*-statistic (in parentheses) are reported.

All variables are defined in Table 1.

^{**} and * denote statistical significance at the 5% and 10% levels, respectively, for a two-tailed *t*-statistic test.

^{**} and * denote statistical significance at the 5% and 10% levels, respectively, for a two-tailed *t*-statistic test.

Table 5
Regression Results on Determinants of Quantity

	0		
	(1)	(2)	(3)
Intercept	6.900 ** (12.63)	4.467 ** (4.95)	5.747 ** (5.80)
APPL		2.744 ** (3.41)	0.258 (0.23)
COMPL		1.943 ** (2.13)	1.211 (1.43)
FI	-0.448 (-1.57)		-0.404 (-1.41)
SIZE	0.151 ** (2.78)		0.126 * (1.83)
RISKEXP	1.997 ** (2.01)		1.973 * (1.81)
VOLUME	-0.114 ** (-2.70)		-0.106 ** (-2.48)
AF	-0.017 * (-1.79)		-0.013 (-1.32)
LEV	0.706 ** (2.80)		0.631 ** (2.43)
CR	0.105 ** (2.49)		0.104 ** (2.47)
R^2 Adjusted R^2	0.470 0.396	0.262 0.235	0.492 0.397

We run regression of quantity of disclosures (QUAN) on its determinants. In the first model we run the regression on the proxies for net benefits of disclosure. In the second model we test for the relation between QUAN with APPL and COMPL. In the third model we test the hypothesis H3a. The coefficients with associated *t*-statistic (in parentheses) are reported. All variables are defined in Table 1.

*** and * denote statistical significance at the 5% and 10% levels, respectively, for a two-tailed *t*-statistic test.

Table 6
Regression Results on Determinants of Quantity Across Low and High
Applicability Firms

	LOW	HIGH	LOW - HIGH
Intercept	5.946 **	3.750	-2.196
A DDI	(6.59)	(1.27)	(-0.81)
APPL	1.177	-2.103	-3.281
	(0.97)	(-0.86)	(-1.21)
COMPL	1.124 *	4.188	3.065
	(1.81)	(1.72)	(1.44)
FI	-0.023	-0.545	-0.522
	(-0.09)	(-1.05)	(-0.93)
SIZE	-0.060	0.218	0.278 *
	(-0.91)	(1.48)	(1.77)
RISKEXP	5.809 ** (5.39)	1.326 (0.74)	-4.483 * (-2.01)
VOLUME	-0.105 **	-0.075	0.030
	(-3.62)	(-0.58)	(0.27)
AF	0.023 * (2.08)	-0.023 (-1.50)	-0.047 ** (-2.15)
LEV	0.302	0.509	0.207
	(1.51)	(0.98)	(0.40)
CR	0.108 **	0.203	0.095
	(4.15)	(0.79)	(0.47)
R^2 Adjusted R^2	0.801	0.376	0.663
	0.712	0.064	0.494

We run regression of quantity of disclosures (QUAN) on its determinants, APPL and COMPL, separately for firms with APPL below median and APPL above median. The coefficients with associated *t*-statistic (in parentheses) are reported. In third column, the difference in coefficients is presented along with associated *t*-statistic (in parentheses) calculated from the model that included indicator variable for high applicability firms, and additional interaction variables representing determinants, APPL and COMPL multiplied with the indicator variable. All variables are defined in Table 1.

^{**} and * denote statistical significance at the 5% and 10% levels, respectively, for a two-tailed *t*-statistic test.