

i. Introduction

First and foremost, we thank the reviewer and agree with his statement that academic research on the usefulness of financial instruments reporting standards is essential, timely, relevant, and important. Indeed, our study calls for further work to be done on this worthy topic and provides some suggestions. We structure this response document as follows. First, for those new to the area, we describe what motivated – and continues to motivate – our work in this field, and hope that in-so-doing we might inspire others to explore related questions. Second, we present the research aims and objectives. Third, we outline the key results. Fourth, we respond to individual comments raised by the reviewer. Finally we offer our thanks to the reviewers, the editor (Professor Abdel-Khalik), as well as participants at *The International Journal of Accounting* symposium for their helpful comments and suggestions. We note that a number of issues raised have been incorporated in the final version of our paper.

ii. Motivation

While the extant literature emphasizes the cost-benefit approach to disclosure decision-making (particularly about optimal levels of disclosure), the key constraining factor(s) which guide what the firm actually does (regarding disclosure level) has (have) been neglected. This effect cannot be fully appreciated without focusing on the decision process itself. The disclosure of financial instruments provides an adequate setting to study these issues.

The use of financial instruments in operating, financing, and investing activities has increased significantly since the 1990s (e.g. BIS, 2017). Although managers can use financial instruments for speculative or risk management purposes, evidence suggests non-financial firms typically use derivatives to reduce (rather than increase) financial exposures at the firm level (Bartram, 2006). Financial instruments form an important component of corporations' balance sheets as management seek to manage their corporate risk exposures. For example, BP recorded derivative financial instruments of \$4,110M in its 31 December 2017 Group Balance Sheet.

The associated accounting for financial instruments – including IFRS7 *Financial Instruments: Disclosures* [IFRS 7], the subject of our study – might well be controversial and complex, but this suite of financial instruments reporting standards often represent the cornerstone for understanding a corporation's risk profile. The objective of IFRS 7 is to deal with the disclosures required in an entity's financial statements relating to financial instruments. In particular, IFRS7 requires disclosures of:

- The significance of financial instruments for the entity's financial position and financial performance; and
- The nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period and how the entity manages those risks.

iii. Objectives and Hypotheses

We agree with the discussant that disclosure levels cannot be fully understood without looking at the economic impact. Following guidance, the objectives of our original article were broadened, emerging as threefold:

1. to determine what affects the applicability of, and compliance with, IFRS7
2. to consider how applicability, compliance and the company's financial instruments management programme affect the quantity of financial instruments disclosures
3. the economic effects of the mandatory disclosure process and outcome

There are three stages to the disclosure process – (i) applicability – management decide whether a specific disclosure is applicable to their firm, (ii) compliance - management decide whether to comply, and (iii) volume – management decide how much information to disclose. The first stage – applicability – is relatively novel to the field of enquiry. These three stages lead to the reduced number of hypotheses set out in the paper. We eliminated the last six hypotheses in line with the discussant's guidance.

Finally, again incorporating the discussant's excellent suggestion, we examine how the emerging disclosure might affect audit fees; arguably an important economic outcome. We hypothesize that the quantity and complexity of financial instruments management programme is positively associated with audit fees.

iv. Model and Results

Data are hand collected for a sample of 58 non-financial FTSE firms for the first year of IFRS7 implementation, i.e. years commencing on or after 1 January 2007. The following regression models are estimated:

$$APPL_i = \alpha_0 + \sum_{j=1}^4 \alpha_j FIMANPROG_{i,j} + \epsilon_i$$

$$COMPL_i = \alpha_0 + \sum_{j=1}^4 \alpha_j DISCLINC_{i,j} + \epsilon_i$$

$$QUAN_i = \alpha_0 + \alpha_1 APPL_i + \alpha_2 COMPL_i + \sum_{j=1}^4 \alpha_j FIMANPROG_{i,j} + \sum_{j=1}^4 \alpha_j DISCLINC_{i,j} + \epsilon_i$$

$$LAF_i = \alpha_0 + \alpha_1 QUAN_i + \sum_{j=1}^3 \alpha_j FIMANPROG_{i,j} + \sum_{j=1}^{14} \alpha_j CONTROLS_{i,j} + \epsilon_i$$

where subscript i is a specific company; APPL is applicability level, COMPL is compliance, QUAN is quantity of disclosure, LAF is the natural logarithm of audit

fees, FIMANPROG is a list of variables representing the financial instruments management programme, DISCLINC is a list of variables representing the incentives to voluntarily disclose information, and CONTROLS are other variable known to be associated with audit fees.

The study finds that:

1. Both firm size (SIZE), the sum of total derivative assets and liabilities to size (RISKEXP) and the dichotomous hedge dummy (HEDGE) are statistically positively related to the applicability of IFRS 7. These results are economically significant.
2. Compliance (COMPL) does not seem to be affected by any of its potential determinants.
3. Applicability (APPL) and compliance (COMPL) are significant determinants of quantity in individual regressions but are not significant in multivariate regressions. However, SIZE and RISKEXP are both statistically and economically positively related to the quantity of disclosure
4. There is evidence of an economic effect of FI on audit fees. There is a significant positive association between audit fees (LAF) and FI – consistent with the argument that auditors charge a premium to compensate them for the additional effort required to audit complex financial instruments. Interestingly, there is a significant negative association between LAF and QUAN. Crucially allowing for the aforementioned premium, companies that provide a relatively large amount of financial instruments disclosures can reduce the audit risk premium, which is conferred by way of lower audit fees.

v. Suggestions

a) Aims and focus

We acknowledge that the results of the analysis of the objectives set out above (section iii) might be of interest to a wider group than regulators, e.g. shareholders, analysts, and auditors. Whilst this project was not intended to address whether the financial instruments disclosures meet the needs of one specific user group, we welcome and endorse the suggestion that there is merit in this more focused approach (e.g. testing the economic effects on shareholders through returns or bid-ask spread models). Thus, we encourage further research to focus on specific information needs of a single user group, and investigate the economic, social, and political implications of non-, partial-, full-, or over-disclosure of certain items.

b) Modelling

The model presented in section iv) is an improved version of the model stated in the reviewer's comments. We agree that testing of determinants of COMPL using APPL as a determinant is problematic. The decision on what requirements are applicable and whether the firm will comply with the applicable requirements are sequential. Nevertheless, the decision on applicability is mechanical and does not depend on disclosure incentives. Similarly, there is no reason why applicability should determine compliance. Therefore, we adjusted our specification following the relations between different variables outlined in Figure 1 of the paper.

In addition, we carried out tests using the model specification suggested by the discussant. Consistent with the results reported, COMPL remains insignificant. Crucially, all of the key QUAN results remain unchanged. We thank the discussant for highlighting this point.

c) Sample

We acknowledge that the sample size is biased towards the largest, most well established non-financials from the London Stock Exchange (LSE). The selection of a sample comprising solely of companies listed on one stock exchange is advantageous because it avoids the heterogeneity problems associated with a multi-jurisdictional study. We believe that our findings are robust. Economically, the largest LSE firms operate in a rich disclosure and regulatory environment resulting in small variation among these most scrutinized firms. Econometrically, the small sample reduces the power of our tests. Despite these limitations it is likely that the observed results present the lower magnitude bound than would arise with a wider sample of firms in a weaker regulatory environment (Leuz and Verrecchia, 2000); Lang, Lins and Maffett, 2012).

The scope and nature of the disclosures, consisting of over 100 potential disclosure items, and hence the complications of the associated manual data collection process, are extremely time consuming. The study's focus on a small sample is appropriate and consistent with other similar work (e.g. Miihkinen, 2012; Linsley and Shrides, 2006; Abraham and Cox, 2007).

Nonetheless, the generalizability of the results could be questioned. We call on other researchers to replicate the work using larger sample sizes and/or other jurisdictions, but suggest alongside this that caution be shown because the resources required are non-trivial.

d) Control variables

Business complexity risk is an area that management might wish to hedge. Higher institutional ownership, ownership concentration and corporate governance characteristics (e.g. duality, few NEDs) increase the monitoring requirements of a firm. We thank the reviewer for raising these insights that we will embrace in future research.

We take this final opportunity to thank the reviewer for his careful reading of our paper and helpful comments. We also thank the editor, Professor Abdel-Khalik, for his guidance. Finally, thank you to the audience participants at *The International Journal of Accounting* symposium in Rome.

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