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Discussion Papers on Business and Economics
No. 3/2010

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ISBN 978-87-91657-39-9

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Abstract

Since 2005 companies with equity instruments traded on regulated markets in the European Economic Area have prepared their financial reports in accordance with accounting standards issued by the IASB. A survey conducted in 2007 indicated that most of the EU companies that changed from local to IFRS rules incurred additional costs in connection with the transition. Also, companies expected additional future costs from using IFRS. Although the main part of these stemmed from the companies' internal work on IFRS statements, additional costs for external auditing and other external services were identified as substantial but independent of company size.

We analyze whether the application of IFRS standards has increased Danish companies' cost of auditing. Our study is based on a sample of financial reports from large Danish companies from 2002 to 2008. Controlling for a number of general audit fee driving aspects, we find that overall, audit fees have not increased significantly for companies using IFRS rules. However, when combining IFRS with company size and complexity, we find that large and complex companies using IFRS pay a heavy audit fee premium compared to small and less complex companies that also use IFRS. Our results for non-audit fees are less conclusive.

Keywords: Audit fees, non-audit fees, IFRS, transition of accounting regime, empirical study.

JEL descriptors: M4 (Accounting and Auditing).

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1. Introduction

In 2002 the European Council decided that companies with equity or debt instruments traded on regulated markets in the European Economic Area (EEA) should prepare their financial statements in accordance with the EU-endorsed accounting standards issued by the IASB. The new regulation should be effective no later than 2005. The European Council also decided that all EU countries had to set up an independent body to oversee the enforcement of the use of the national accounting legislation and international accounting standards. In Denmark the IFRS act was enforced with effect for annual reports from 2005, and the enforcement body was established at the end of 2004.

In November 2007 the Institute of Chartered Accountants in England and Wales (ICAEW) published a survey of the effects of the EU implementation of IFRS standards and the fair value directive.[1] The analysis, which was funded by the European Commission, covered a wide range of aspects, including round table discussions with preparers and auditors, surveys of investors, preparers and auditors, and detailed technical analysis of IFRS-consolidated financial statements. One of the aspects covered was the additional costs companies suffered from the introduction of the new accounting rules. The analysis showed that most companies which changed from local to international accounting rules had additional costs in connection with the first-time implementation. The analysis estimated the costs for first-time implementation of IFRS rules to be 0.31% of net revenues for small companies with revenues below 500 million EUR and the additional costs for larger companies to be 0.05% of net revenues. Furthermore, the analysis showed that a lot of companies were expecting additional costs from using the international accounting rules in the future.

The analysis also pointed out that the main part of the additional costs stemmed from the companies' internal work on the IFRS project. The additional costs for external auditing and other external consultancy services were identified as substantial but independent of the size of the company.

The stricter enforcement of the IFRS act would, according to the ICAEW survey, lead to increased auditing costs for the affected companies for the year 2005 and ahead. This conclusion was based on the presumption that a financial report prepared in accordance with IFRS would give rise to a higher work effort by the auditor – particularly in the first year of compliance.

In Denmark the enforcement body, named The Danish Security Council, was set up at the end of 2004. In 2005 it made a few decisions concerning financial reporting for the year 2004. The number of decisions concerning 2005-reportings increased rapidly in 2006. A number of companies were required to submit additional accounting information to the capital market, and a few were required to redo their financial reports for the year. Since the enforcement body's decisions are public, it may be presumed that the precision of the preparers of financial reports has increased – not just among the companies directly affected, but among all companies. Likewise, it may also be presumed that the auditors have increased their effort, which again should be reflected in the reported audit fee for the year 2006.

The scope of the ICAEW report is the total extra costs, internal as well as external, which companies have incurred from the transition to IFRS reporting. It would, however, be unfair to conclude that a transition to IFRS reporting bears only costs and no benefits for the company. In particular, it is difficult to argue that adjustments to a company's information and control system serves no other purpose than supporting the preparation and documentation of the financial reporting. The internal advantages of a finer information system may be difficult to evaluate. External costs associated with the change to IFRS reporting are primarily the auditing costs. Although the company itself may potentially experience positive market effects from the altered accounting reports that result from

using IFRS standards, the main benefits will be absorbed by the external parties in the capital market. Based on this it might be argued that the extra auditing costs that are potentially associated with IFRS reporting are a cost on the part of the company that is not value-adding.

Based on the ICAEW findings and the above observations from the Danish enforcement body we find it interesting to examine whether these relations are reflected in the Danish market, i.e. whether it is possible to confirm that the mandatory application of IFRS standards and the stricter enforcement have actually increased the Danish companies' cost of auditing. The remainder of the paper is organized as follows. In section 2 we review parts of the existing literature on determinants of audit fees. In section 3 we develop our hypotheses, and in section 4 we present our data and empirical model, which is founded on the model introduced by Simunic in 1980. Section 5 presents and discusses our results, and the paper is concluded by a few remarks and suggestions for further research.

2. Literature

A number of contributions to the literature on the determinants of auditor fees are central to our approach. The basic model was developed in Simunic [1980]. He constructed an economic model of the audit fees, including five main explanatory factors which are: a) Size of the auditee, b) Complexity of the audit, c) Auditing problems associated with certain financial statement components, especially inventories and receivables, d) Industry of the auditee, and e) Whether the auditee is a public or a closely held company. Based on his economic model Simunic developed an empirical regression model to analyze the factors that are significant in explaining the audit fee. The data entering Simunic's regression model consist of audit fees and other (primarily accounting) information from a large number of public companies (cross-section), either for a particular year or for a number of years (time-series). For each of the four factors, a-d, Simunic selected one or more specific financial reporting variables to reflect the factor. His empirical tests confirmed that the size of audit fees could be

explained by the identified factors. Our analysis uses Simunic's auditor fee model as the basis, elaborating further on the general factors and adding specific variables capturing the potential effects of doing IFRS statements.

Several other studies have used Simunic's model to explain various aspects of the link between audit fees and auditee attributes. Simon and Francis [1988] and Craswell and Francis [1999] used variations of the model to study whether differential pricing exists on initial auditing engagements. Simon and Francis found strong evidence for price discounts in initial audit engagements among US companies. However, using publicly available audit fees from Australian companies, Craswell and Francis found that price discounts were statistically significant only when companies changed from a non Big 8 to a Big 8 auditing firm. Rubin [1988] used the model to examine the determinants of municipal audit fees. His results are similar to those found by Simunic and this suggests that the market for municipal auditing is just as competitive as for public and private companies. Tinggaard and Kiertzner [2008] use the Simunic model to analyze audit costs in a setting where joint audits are required. Their results indicate that joint audits where both auditors have significant stakes in the audit reduce audit fees compared to audits where one auditor is dominant, albeit only for larger companies. Jong-Hag Choi et al. [2008] investigate relations between legal liability regime, audit quality and audit fees. They find that the strictness of a country's legal liability regime is an important fee-increasing factor. Within any given legal liability regime, Big 4 audit firms charge higher audit fees, but the Big 4 premium decreases as countries' legal liability regimes change from weak to strong. The effect of legal regimes on audit pricing and Big 4 premium is more salient for small and medium-sized firms than for large firms. Hay et al. [2006] evaluated and summarized the large body of audit fee research. They used meta-analysis to test the combined effect of the most commonly used independent variables. They found that although many independent variables have consistent results across various studies, several variables show no clear pattern, and other variables only show significant results in certain periods or particular countries. The size of the auditee measured by total assets and/or revenues is a

very important factor in any model of audit fees. Further, the meta-analysis shows strong evidence of a positive relationship between complexity and audit fees. Inherent risk measured by receivables and inventories (both variables divided by total assets) are strongly related to audit fee. Another measure of inherent risk, going concern issues, has during the 1990s become an increasingly important driver of audit fees, whereas the presence of internal control is found to be insignificant. Corporate governance and industry code is found to be weakly significant. Also audit quality (defined as using Big 4 – or Big 8**)** is significantly related to audit fee. Another proxy for audit quality, audit tenure, is found to be insignificant. It seems that a dummy variable indicating an auditor change is a better proxy. Non-audit service fees are found to have a positive relationship to audit fees in many of the studies. Therefore, the notion that audit fee cutting is used to attract new customers in order to increase one's share of lucrative non audit services is not empirically supported.

3. Hypotheses

In this section we will discuss the hypotheses that our empirical study is intended to address. Based on the former studies of audit fees mentioned above we conjecture that the size of audit fees depend on up to seven general factors described in the next section. In our analysis we enter variables reflecting these factors on a stepwise basis and add, on top of these general factor variables, a number of IFRS-related variables to address our specific hypotheses. Our main hypothesis is:

H1: Auditing an IFRS statement is more time consuming than auditing a similar financial statement prepared according to *the Danish Financial Statements Act* and therefore audit fees are higher for an IFRS statement.

This hypothesis is founded on several observations. First of all, the IFRS standards comprise a large set of detailed rules for the measurement and presentation of a number of specific accounting items. *The Danish Financial Statements Act* has fewer specific requirements; to a much larger extent it may

be characterized as a framework law. Furthermore, the IFRS requires current value (fair value) assessment for a number of balance sheet items, whereas *the Danish Financial Statements Act* as a main rule prescribes historical cost except for some financial instruments and for investment properties when the latter is a main activity. One main area of difference is the accounting for intangible assets, specifically goodwill. Here the Danish rules require systematic depreciation over the useful life. IFRS 3 (business combinations) requires that any recognized goodwill be attached to a specific cash generating unit; that an annual impairment test (IAS 36) must be done to establish if the value of goodwill has decreased; and, if that is the case, that the reduction of the goodwill be amortized. Another area where IFRS rules are more complicated is share-based payment (IFRS 2) for which *the Danish Financial Statements Act* only requires disclosure of the content of the contracts employed. IFRS 2 requires that the fair value of the equity instrument used (warrant or option) must be calculated at the grant date and that this value must be expensed through the vesting period. Additionally, the disclosure requirements, according to the IFRS, are much more comprehensive than the ones required according to *the Danish Financial Statements Act*.

Based on the observed specific differences between IFRS rules and Danish accounting legislation we further hypothesize that:

H2: Given that a financial statement is based on IFRS, the extra audit fee will be higher the larger and more complex the company is.

Smaller and less complex companies only have few intangibles and acquire fewer subsidiaries compared to large ones. Therefore the amount of extra audit effort required will be higher the larger and more complex a company is. Since both the size of the auditee and the complexity of the auditee's operations are among the general factors determining the audit fee, this hypothesis and our main hypothesis (H1) indicate that we expect to find interaction effects between IFRS and these general factors.

In general, it is to be expected that the stricter the control, the more effort will be put into a job. The increased effort may, however, be postponed until evidence supporting that the enforcement is in fact stricter has been gathered. The central enforcement body (in Denmark: The Danish Security Council) that is built into the EU regulation is new. Until 2004 the enforcement was less strict, mainly because companies to a larger extent were permitted to choose specific accounting methods that they found would give a true and fair view of their economic performance and position. Therefore we expect that auditors may have put extra effort into the audit of the financial statements for 2006; the second year with IFRS. This may be expressed in the following hypothesis:

H3: Audit fees for IFRS statements were generally higher in 2006 than in other years.

If the above argument is accepted, one might wonder if the audit effort would not be permanently higher from 2006 and onwards. If so, the effect could be detected as a discount in the audit fees for IFRS statements for the year 2005 and earlier. However, we believe that the increase in auditor effort will dampen in the following years because the auditee will adjust his systems and take over some of the extra effort and that the effect is therefore specific for the year 2006.

The mandated transition to IFRS accounting may also have affected the companies' non-auditing fees. Particularly in the years leading up to the first-time application of IFRS we assume that many companies may have had consultations with their auditors about how to adjust information systems to support the new required disclosures and valuations. Since Danish listed companies are, with a few exceptions, smaller than companies in many other countries, we expect this effect to be especially pronounced among the smaller listed companies. Presumably, the smaller companies do not have large and specialized accounting departments possessing the skills necessary to implement the complex systems required. These considerations are formally stated as:

H4: For companies changing to IFRS statements, non-audit fees is higher in the years leading up to the first year in which IFRS is actually used, and

H5: This effect is more pronounced among smaller companies than among large ones.

4. Our data and model

Our study is based on publicly available information obtained from a sample of annual reports from large Danish companies[2]. Banks, insurance companies and other financial companies are excluded because they prepare financial statements according to a special set of accounting rules. The final sample[3] consists of data from a total of 1,593 financial statements representing 269 large Danish companies during the period 2001 to 2008. The number of cases from each year varies from 46 in 2001 to 258 in 2005. Of the 1,593 cases, 458 are from listed companies and 1,135 from closely held companies. 273 of the cases are from financial statements prepared in accordance with all IFRS standards. A large number of the non listed companies in our sample have not adopted IFRS accounting.

Data were collected from copies of the published annual reports sent to the Danish authorities (The Danish Commerce and Company Agency). The companies included were identified by their registration number in the central company register (CVR). Annual reports covering less than or more than 12 months were omitted from the sample. Data were registered for parent company accounts as well as consolidated accounts. In our analysis, however, only data from the highest level are used; i.e. whenever consolidated financial statement data are available we use these, and if no consolidated data are registered we use the data for the single company. 683 cases are from consolidated financial statements.

The variable of primary concern, the IFRS variable, is a dummy variable given the value 1 if the financial statement is an IFRS statement and 0 otherwise. The variable is measured by reading the introduction to the note specifying accounting practice. Here it is stated whether the accounts are prepared according to the full set of EU-endorsed IFRS (and IAS) standards or in accordance with *the Danish Financial Statements Act*. A number of Danish listed companies made a successive transition

to IFRS during the years 2003 and 2004. During that period their financial statements are registered as being prepared in accordance with *the Danish Financial Statements Act* up until the year where they state that the full set of EU-endorsed IFRS- and IAS-standards are used.

Our model is an extension of the basic model developed in Simunic [1980] supplemented by a number of variables reflecting our hypotheses about the impact of preparing financial statements according to the IFRS standards. The model introduces variables explaining the size of audit fees (and total payment to the auditor for audit services as well as non-audit services) in three steps. In the first step we include variables that control for Simunic's general factors. Based on Simunic [1980] and Hay et al. [2006] we include variables reflecting seven factors:

1. The size of the auditee,
2. The complexity of the auditee's operations,
3. Auditing problems associated with certain financial statement components, especially inventories and receivables,
4. The industry of the auditee,
5. Whether the auditee is a publicly or closely held company,
6. The type of auditor, and
7. Going concern issues.

Variables from these general factors are introduced into our regression model on a stepwise basis. In the second and third layers we enter the IFRS variable along with a number of IFRS-related variables reflecting our hypotheses. The IFRS-related variables include time-related variables as well as variables reflecting the interaction between IFRS and the size and complexity of the auditee. The specific variables analyzed are presented below.

The dependent variables

In our analysis we use two different dependent variables: a) Fee for legal auditing services (named AUDITFEE), and b) Total payment to auditors for auditing as well as non-auditing services (AUDITOR-PAY). In cases where two auditors are performing the services we measure the combined fee to the two auditors. Both variables are measured in thousand Danish kroner.

The independent control variables

The size of the auditee

A number of financial statement items may be used as proxies for size. Total assets and Net revenues are prominent examples. From our data we found the correlation coefficient between these two items to be 0.984. Therefore we decided to use only Total revenues. Furthermore, because this variable is heavily skewed we take the log (base 10) of Total revenues as the variable controlling for size of the auditee. This variable is named LOGREV.

The complexity of the auditee's operations

The complexity of the auditee's operations is a factor that affects the amount of effort the auditor has to deliver in order to produce a reasonable assurance. Complexity can, however, be caused by many things. Therefore a number of variables are candidate proxies for complexity. Among these are a) the number of subsidiaries, b) whether the company runs a share-based incentive program, c) the industry, d) the size of the auditee, and e) whether the company is a listed company. Industry, size and whether it is a listed company are general factors themselves, so variables reflecting these characteristics will be described elsewhere. In our analysis we are left with two complexity-related variables. The number of subsidiaries is a highly skewed variable and therefore we decided to take the log (base 10) of the number of subsidiaries plus one (the total number of companies that are 'consolidated' into the group accounts). This variable is named LOGSUB. The other complexity varia-

ble, named INCENT, measures whether the company runs a share based incentive program (=1) or not (=0).

Auditing problems associated with certain financial statement components

Simunic [1980] and others have advocated that certain financial statement components, especially Inventories and Receivables, are particularly time consuming in the auditing process and are therefore driving audit fees up. The development in computerized ERP control systems has, however, decreased the auditing problems associated with these items. Also Inventories and Receivables are highly correlated (correlation = 0.692); and although deflating by Total assets lowers the correlation somewhat, we decided to include only Inventories/Total assets (named INVENT) in our analysis.

Recent developments in *the Danish Financial Statements Act* and the introduction of IFRS standards have, however, brought other financial statement items into the picture. The increased attention to development projects and the IASB's drive towards fair value combined with annual impairment tests on goodwill and other intangibles have presumably led to more auditing effort being put into the control of this item. Based on this we expect intangible assets to be one of the financial statement components that drive auditing cost. Since all asset values are non-negative, we expect their distributions to be highly skewed. This problem is addressed by deflating Intangible assets by Total assets. This variable is named INTANG in our analysis.

To sum up, we include two variables reflecting financial statement components that are particularly time consuming in the auditing process. These are INVENT (Inventories-to-Total assets) and INTANG (Intangible assets-to-Total assets).

The industry of the auditee

This general factor is based on an observation stating that different industries have different levels of inherent risk associated with their activities. The companies' industry was registered as the first two digits in the official industry code used by the Danish authorities. The industry code was subsequent-

ly recoded into dummy variables indicating a) primary sector, b) manufacturing c) construction, and d) services. Since these variables produced rather mixed results (presumably because the dummy structure is too weak to reflect variances in inherent risk), we decided to measure industry through proxy variables that more directly reflect varying inherent risk. The first of these variables is TANGIB (Tangible fixed assets-to-Total assets). This variable indicates the company's capital intensity which may be seen as an indirect indicator of industry. Asset turnover calculated as Revenues-to-Total assets is another indirect indicator of industry. Rather than using this variable as an indicator of industry, we construct three dummy variables: a) TURN10, defined as Revenues-to-Total assets between 1.0 and 1.5; b) TURN15 (Revenues-to-total assets between 1.5 and 2.0); and c) TURN20 (Revenues-to-Total assets larger than 2.0). In this way, all cases are split into four groups with the base group being cases with Revenues-to-total assets below 1.0.

Whether the auditee is a publicly or closely held company

This factor is measured directly as a dummy variable named LISTED (=1 if the auditee is a publicly held company and 0 otherwise).

The auditor

This factor covers a number of variables related to the institutional frame around the auditor and the auditing process. The variables relating to this general factor are constructed from a registration of the number of elected auditing firms and the specific names of the elected auditing firms for each of the sampled cases.

The financial statements of Danish companies are audited by one or two audit firms. Until 2002 publicly held companies were obliged to have two independent auditor firms performing the legal audit. In the following years an increasing number of companies decided to let the audit be performed by only one auditor. To capture whether audit fees are higher when two auditors are engaged we include the variable AUDNUM, the number of elected auditors, in our analysis. The inclusion of this

variable is based on the findings in Tinggaard and Kiertzner [2008]. The fact that not all listed companies immediately changed to only one auditor may indicate that the decision to change may have been an economic decision. Therefore we also include a dummy variable, CHGAUDNUM, taking on the value 1 if the number of auditors is changed from last year, and 0 in all other cases.

For various reasons4 companies may decide to change from one audit firm to another. Simon and Francis [1988] and Craswell and Francis [1999] found evidence that auditor changes were associated with lower audit fees, at least in the first year after the change. To capture that effect we include the dummy variable CHGAUD, indicating a change of auditor5 compared to last year.

Jong-Hag Choi et al. [2008] reported evidence that Big 4 audit firms charge higher fees than others. To capture this potential effect we constructed a dummy variable, BIG4, with value 1 whenever at least one auditor was a Big 4 and 0 otherwise.

IFRS statements were required for financial years starting on or after January 1, 2005. At the same time, a new regime of auditing standards was introduced. The new auditing standards may themselves have affected the auditor's effort and the audit fees. In order to capture this effect we include a dummy variable, named AUDREG, taking on the value 1 if the year is 2005 or later, and 0 otherwise. Although a number of companies did actually adopt IFRS statements before 2005, the effect of AUDREG may, however, also be due to the introduction of IFRS statements. To the extent that AUDREG enters our regression model it will therefore pose a fundamental problem for the interpretation of our empirical results. We have investigated this problem by running the regressions both with and without AUDREG as a control variable.

As will be clear from our results, the variable AUDREG does in fact enter into the AUDITFEE regression model when we analyze the full sample. However, AUDREG does not appear in any of the subsamples that we also analyze. In regressions with AUDITORPAY as the dependent variable, AUDREG appears in both the full sample and in two of our four subsamples. These results indicate that

there is a confounding variables problem here. As mentioned above, we have addressed the problem by running the regressions both with and without AUDREG.

It should be noted that the included auditor control variables, with the possible exception of BIG4, are directly related only to the audit fee, i.e. the variable AUDITFEE. There is no immediate reason why these variables should affect the fees for non-audit services.

Going concern issues

The last general factor intends to capture the risk of problems with going concern. When losses are likely, management has incentives to manipulate financial statements. This may signal that the auditor has to increase his effort and therefore raises the audit fee. Rather than representing this by a negative income dummy and/or a reduction in equity we use three continuous variables: a) Net income-to-Total assets (named PROFIT), b) Book value of equity-to-Total assets (EQUITY) and c) Log (base 10) to financial expenses (LOGFINEXP). The latter variable is expected to increase when a company is drawing close to financial distress.

Variables reflecting IFRS statements

The variables mentioned above are considered to be general control variables in our application of the Simunic model. Our analysis is designed to address the question of whether or not the introduction of mandated IFRS statements and the (presumed) stricter enforcement through *The Danish Security Council* has resulted in higher audit fees (H1) and/or higher fees for non-audit services provided by the auditor. Therefore our dataset includes a dummy variable indicating whether the particular financial report is prepared in accordance with IFRS rules or in accordance with the rules of *the Danish Financial Statements Act*. This variable is named IFRS.

As we wish to address several subquestions regarding the relation between the use of IFRS rules and audit fees, this measure has been transformed into several variables. Since many Danish listed companies are relatively small, we expect that they do not possess the necessary skills to work their way

through the large number of mandated IFRS standards and that they therefore in the years up to the transition to IFRS statements may have had consultations with their auditors (H4). Also the introduction of a stricter enforcement body may have created more auditor effort in the first years after the transition to IFRS. These effects could show up in the audit fee and/or the non-audit fee in the years before or after the transition to IFRS statements. To catch these potential effects we created the following variables: a) IFRS introduced next year (IFRSNEXT), b) IFRS introduced this year (IFRSFIRST), c) IFRS introduced last year (IFRSLAST), and d) IFRS introduced 2 years ago (IFRSTWO). Variable a), IFRSNEXT, takes on the value of 1 if next year is the first with IFRS statements, and 0 otherwise. The other variables are defined in a similar way. We further created four variables identifying whether the financial statement was prepared using IFRS for each of the years 2004, 2005, 2006 and 2007 respectively. These variables are labeled IFRS2004, IFRS2005, IFRS2006 and IFRS2007, respectively. In particular IFRS2006 should capture the effect discussed in H3

Based on the assumption that larger and more complex companies have more and higher quality accounting personnel than smaller companies, we expect larger companies' ability to set up the internal control systems necessary to support IFRS accounting to be better than that of smaller ones (H2). Because of this there may be interaction effects between the use of IFRS and various measures of company size and or complexity. To test this hypothesis we created the following interaction variables: a) IFRS and the log (base 10) of Total revenues (named IFRS×LOGREV), b) IFRS and the log (base 10) of Number of subsidiaries plus 1 (IFRS×LOGSUB), c) IFRS and Intangible fixed assets-to-Total assets (IFRS×INTANG). These interaction variables were created by multiplying the IFRS indicator variable by the relevant accounting measure.

Table 1 around here

Table 1 summarizes our variables.

The model

To test our hypotheses we have run a number of regression analyses on two principal models:

$$\text{Audit fee} = a_0 + \Sigma\, a_i \cdot X_i + \Sigma\, a_j \cdot IFRS_j + \varepsilon_1, \text{ and}$$

$$\text{Audit fee + Non audit fee} = b_0 + \Sigma\, b_i \cdot X_i + \Sigma\, b_j \cdot IFRS_j + \varepsilon_2,$$

where the X_i variables are the control variables controlling for the seven general factors, and the $IFRS_j$ variables are one or more of our test variables mentioned in the previous section. The potential independent variables to enter the model are described above.

The above specified models are analyzed in the following way. First we run a regression where our control variables are entered on a stepwise basis along with the variable IFRS[6] to test whether the audit fee and non-audit fee differs for IFRS statements compared to non-IFRS statements. In the next step we add the variable IFRS along with the interaction variable IFRS×LOGREV. Finally, we add all our IFRS variables to the model. Both models (1) and (2) are run on the full sample of cases. Next, the whole set of regressions was performed on a subsample (1,278 cases) excluding the 20% largest companies (based on the size of Total assets), and another subsample (1,279 cases) excluding the 20% smallest companies (again based on Total assets). These subsamples are analyzed to address hypothesis H5 and to check the robustness of the model.

5. Results

Overall data (dependent variable: AUDITFEE)

The data sample contains 1,593 cases and according to the model constructed above with the dependent variable AUDITFEE, the significant (5%) independent control variables are identified through a stepwise regression as follows in table 2:

Insert table 2 about here

Table 2 shows that, except for *going concern issues*, all the audit fee-driving general factors enter into our regression model with significant coefficients. All coefficients have the expected signs except for the variable AUDREG. The direct interpretation of the coefficient to this variable is that it has become less expensive to perform an audit under the new auditing regime introduced with the revised auditing standards in and after the year 2005. This is not as expected, but because the mandated use of IFRS for listed companies also began in 2005, the result may reflect a confounding effect. Entering the variable IFRS into the model along with the control variables (see column A of table 2) does in fact change the significance of AUDREG so it is no longer significant at the 5% level – though still at the 10% level. The variable IFRS, however, is not significant at all. This may be interpreted as an indication that in general audit fees have neither increased nor decreased as a result of IFRS statements.

To analyze this further we repeated this analysis excluding the variable AUDREG. The results from these regressions were essentially the same as those described above in table 5.[7] We therefore decided to keep AUDREG in our further analyses.

To further examine the audit costs associated with using IFRS we add the interaction variable IFRS×LOGREV. The result of this is shown in section B of table 2. The variable AUDREG is no longer significant – neither at the 5% or the 10% level. We interpret this as an indication that the change in audit regime in 2005 did not affect the audit fees. Instead the two IFRS variables are highly significant: IFRS with a strong negative and IFRS×LOGREV with a positive coefficient. Also LOGREV itself is significant and positive. This indicates that the size of the auditee (as measured by LOGREV) is a strong determinant of audit fee but that the effect of size depends on whether the financial statements are prepared under IFRS or *the Danish Financial Statements Act*. The coefficients suggest that

IFRS may be less expensive for a small company but that this effect is offset when the company is sufficiently large. The logic behind this is that compared to traditional accounting law regulation, IFRS standards require more complex fair value measurements and additional disclosures (and therefore more auditing effort) for a number of assets and liabilities that are mainly present in large companies. From the specific coefficients to the variables IFRS and IFRS×LOGREV we infer that on average audit fees will be higher for companies doing IFRS statements if

$$-16{,}547.854 \cdot IFRS + 2{,}723.211 \cdot IFRS \times LOGREV \geq 0, \text{ i.e. if } LOGREV \geq 16{,}547.854/2{,}723.211 \approx 6.077,$$

which translates into Revenues $\geq 10^{6.077} \approx 1.2$ billion Danish kroner.

For a deeper analysis of this we add several other IFRS variables. As shown in table 2, section C, the model is basically unaffected by the control variables, although the coefficients to the variables LOGSUB and INTANG (reflecting complexity and accounting items with special auditing problems, respectively) have decreased dramatically compared to section B. As for the IFRS variables, only two of the added variables are significant, IFRS×LOGSUB and INTANGIFRS×INTANG. Both these interaction variables have positive coefficients indicating that more complex companies (companies with many subsidiaries) and companies with relatively large Intangible fixed assets pay higher audit fees when they are issuing IFRS statements compared to similar companies that are not issuing IFRS statements.

The combined results from sections A, B and C of table 2 show that there is not a clear-cut conclusion as to whether IFRS in general has increased audit fees. On average audit fees are unaffected by the transition from Danish rules to IFRS rules. It seems, however, that the large companies with a complex accounting structure and large intangible assets have experienced an increase in audit fees, whereas the smaller and less complex companies with no or few intangibles got a discount on audit fees from the adoption of IFRS.

As discussed in the earlier sections, the mandated IFRS adoption may have resulted in higher non-audit fees in the transition period because the companies needed extra consulting hours with their auditor to implement the necessary information systems to support the new accounting measurements and the enlarged disclosure requirements. Since non-audit fees are assumed to be caused by a number of ad hoc problems and events not necessarily connected with general financial reporting issues, we do not expect a specific model of the determinants of non-audit fees parallel to the audit fee model to be feasible. Instead, we use the audit fee model to analyze the relationship between total auditor pay, AUDITORPAY, i.e. the sum of audit fee and non-audit fee, and the variables discussed earlier.

Insert table 3 about here

Changing the dependent variable to AUDITORPAY, we get a vaguely changed picture, see table 3. Notice first that the significant control variables are the same as in table 2, although the coefficients are nominally higher. In section A IFRS is significant at the 10% level, but with a negative coefficient. Also AUDREG is still significant at the 5% level and has a negative coefficient as well. This result indicates that the total fee to the auditor has become smaller after 2004, even though IFRS has been introduced. One possible explanation could be that the auditors since late 2003 have been restricted in their ability to provide certain non audit services to their audit clients. The size variable LOGREV is the most important with a beta-value of 0.511. From section B we see again that the effect of size depends on whether financial statements are based on IFRS or not. AUDREG is now significant only at the 10% level. The ratio of the coefficients of the two IFRS variables has now increased to 6.28. This indicates that companies must be even larger (revenues larger than 1.9 billion Danish kroner) before the total auditor pay becomes larger for IFRS-reporting companies. Entering all IFRS variables (section C) we see that, as before, the three interaction variables are significant at the 5% level and two other IFRS variables – IFRS2004 and IFRS2006 – are significant at the 10% level, both with positive

coefficients. This result indicates that the total auditor pay was higher for companies doing IFRS statements in 2004 and again in 2006, compared to companies doing financial statements based on *the Danish Financial Statements Act*. Although it may be rather speculative, we interpret the IFRS2004 result as an indication that early adopters of IFRS were consulting auditors who were not yet fully prepared for the new accounting regime. The higher total auditor pay in 2006 may be caused by the fact that 2005 and 2006 were the first years in which the Danish IFRS enforcement body became effective and produced several decisions on companies not abiding by the IFRS rules. This may have led to further consultations with the auditor to better understand the full implications of the IFRS rules. The variables IFRSNEXT and IFRSFIRST are not significant which refutes our hypothesis H4 that IFRS should create increased non-audit fees in the years up to the adoption of IFRS.

Reducing the sample

As is evident from tables 2 and 3, our proxies for industry, which are based on asset turnover, are significant. However, one might conjecture that companies with a relatively small asset base are relatively more expensive to audit than larger companies. The arguments for this are that there is a fixed start-up cost associated with any audit and that large companies usually have more internal accounting competences than smaller companies. To examine whether such effects are present we created two subsamples based on company size measured by the value of total assets. First we removed the 20% smallest cases measured on total assets and next we removed the largest 20%.

Removing the 20% smallest cases

After eliminating the smallest 20% from our sample, we have 1,279 observations left. 246 of these are IFRS reports. Our results for this subsample are set out in table 4.

Insert table 4 about here

Compared to the regressions with all cases (tables 2 and 3) we now find additional significant control variables. These are INVENT and PROFIT both with a negative coefficient and LOGFINEXP with a positive coefficient. This implies that the audit fee driver *going concern issues* is now represented. In return, the control variables INCENT and AUDREG are no longer significant. Compared to the results obtained by Simunic it may seem surprising that INVENT has a negative coefficient. However, modern technology has increased the companies' internal controls, changing the scope of the audit away from the time consuming substantive audit tests towards more cost efficient systems tests. The coefficient to PROFIT is also negative, which is meaningful because higher profits mean that the auditor's materiality level can be increased, and that the audit effort can be reduced. LOGFINEXP has a positive coefficient as excepted; higher interest expenses are based on higher interest bearing debts resulting in higher inherent risk and therefore a higher audit fee. As was the case in the full sample, IFRS is not significant when entered as the only IFRS variable.

In section B, where the interaction variable IFRS×LOGREV is entered along with IFRS, both variables are again significant. The ratio of the two coefficients is 6.21; only marginally higher than for the full sample. We take this as an indication that our basic model does in fact produce a reasonable description of the general factors driving audit fees. When we enter all IFRS variables in section C, we find the same pattern as for the full sample, i.e. only the interaction variables are significant and with the same conclusions as above.

Table 5 shows the results when we change the dependent variable to total auditor pay. In section A we find that IFRS is significant on a 10% level and again with a negative coefficient.

Insert table 5 about here

In section B we find the same results as for the full sample above. Entering all the IFRS variables (section C), we find that the control variable INTANG is no longer significant at the 5% level although still

at the 10% level. More importantly, IFRS2004 is significant at the 5% level and IFRS2005 at the 10% level, and both are positive. Assuming that other events or circumstances are not interfering in these two years, we conclude that there has been an initial additional cost for preparing financial statements in accordance with IFRS rules. These extra costs have been accounted for as a non-audit fee.

Removing the 20% largest observations

When removing the 20% largest cases (measured by total assets), we also remove a relatively large part of IFRS financial reports. This subsample has a total of 1,278 cases of which 141 are IFRS statements.

Insert table 6 about here

From table 6, where AUDITFEE is the dependent variable, we notice that a) coefficients are numerically much smaller than in table 2 (full sample) and table 4 (excluding the smaller cases), and b) the number of significant control variables entering the regression is reduced compared to the other samples above. Among the industry proxies only TURN20 is significant, though still with a negative coefficient, indicating that the audit of companies with a very high asset turnover, i.e. companies that are less capital intensive, are relatively less time consuming and therefore less expensive. Also, none of our going concern indicators are represented here. Instead CHGAUD enters as significant with a negative coefficient. The negative coefficient is expected because all changes in the number of auditors are from two to one, confirming that the decision to reduce the number of auditors is an economic decision. When taken alone (in section A), the IFRS variable is not significant. In section B, where IFRS is entered along with the interaction variable IFRS×LOGREV, we find, again, that both variables are significant with IFRS negative and IFRS×LOGREV positive.

When all IFRS variables (section C) are entered, CHGAUD becomes insignificant. The only significant IFRS variables are IFRS2005, IFRS2006 (10% level), and the interaction variable IFRS×LOGSUB. Having

IFRS2005 and especially IFRS2006 significant is not in line with our hypothesis H3, because the hypothesis states that the coefficient should be positive and they are negative. This means that removing the largest observations causes the audit fee for IFRS statements to be reduced in 2005 and 2006 compared to IFRS statements prepared in other years. This could be caused by many factors, for example that the auditors due to competition were not able to raise the fees for IFRS audits of smaller companies sufficiently in the first years after the mandated transition. Another possible explanation could be that the large audit firms in these years have gained market shares through special discounts (Craswell and Francis [1999]). A third and perhaps more convincing explanation is that the strictness of the new enforcement body was not expected by many of the smaller companies and their auditors. During 2006 *The Danish Security Council* made a number of decisions concerning the 2005 IFRS reports. Some companies were ordered to correct mistakes and a few to redo the entire IFRS report. Also, a few auditors received reprimands from *the Danish Auditors Disciplinary Committee*. As a result, the focus on correct financial reporting was increased among preparers and auditors, with an audit fee increase as a consequence.

Changing the dependent variable to total auditor pay brings only minor changes in the control variables (table 7, section A).

Insert table 7 about here

The control variable CHGAUD (with a negative coefficient in table 6) is no longer significant. Instead BIG4 has entered the model with a positive coefficient. The positive coefficient could be explained by the fact that big four auditing companies offer a wider portfolio of services than other auditing companies. The IFRS variable in section A is insignificant. Moreover, when IFRS in section B is entered along with IFRS×LOGREV, none of the IFRS variables are significant. When all IFRS variables are introduced into the model in section C results become rather blurred. The variables IFRS2005, IFRSLAST (IFRS introduced last year), and IFRSTWO (IFRS introduced two years ago) are all significant at 10% or

better, and with negative coefficients. Also IFRS×LOGSUB is strongly significant with a positive coefficient, indicating that complexity is in play.

6. Conclusion

Wrapping it all up, we can make the following conclusions. At an overall level, the adoption of IFRS has not increased audit fees. For smaller and less complex companies audit fees have actually decreased when they adopted IFRS. However, larger and more complex companies have experienced increases in audit fees because of the transition to IFRS reporting.

Large and complex companies are characterized by relatively high revenues, a firm structure with many subsidiaries and a relatively large portion of their assets being intangibles. Our analysis shows that although these three variables are themselves among the general audit fee increasing determinants, IFRS reporting increases their effect on audit fees dramatically. We therefore conclude that even though our hypothesis (H1) that IFRS reporting in general leads to increased audit fees cannot be supported, we find evidence supporting our hypothesis (H2) that audit fees for larger and more complex companies have increased because of the adoption of IFRS reporting.

We have found no evidence to support our hypothesis (H3) that audit fees for IFRS reports should be higher in 2006 because of the introduction of a stricter enforcement. However, although the results from the analysis in table 6 are inconclusive, it seems that the smaller companies doing IFRS reports did in fact experience higher audit fees in 2005 and 2006. This finding probably reflects the fact that the smaller companies may have had less skilled accounting staff and that the audits of these companies therefore were more time consuming.

The evidence regarding the effect of IFRS reporting on non-audit fees is generally vague. The auditor fees for non-audit services cover a wide range of subjects. Some of the services may be related to the

auditees' accounting system and the transition to IFRS, but other services may be of a quite different nature, for instance tax consulting. Because of this it is not possible to analyze the relation between IFRS reporting and the cost of non-audit services directly. Our indirect analysis relates the total payment to the auditor for auditing as well as non-auditing services to the variables identified as potential determinants of audit fees. The nature of our indirect analyses is evident from the marginally lower R squared in the regressions with AUDITORPAY as the dependent variable compared to those with AUDITFEE as the dependent variable. Our analysis shows that the general control variables explaining the size of auditor pay are basically the same as those explaining variations in audit fees.

We hypothesized (H4) that companies which changed to IFRS reporting would experience higher non-audit fees in the years up to the transition. Our analysis cannot confirm this; IFRSNEXT and IFRSFIRST are not significant in any of our regressions. On the full sample, however, we found that companies doing IRFS reports in 2004 and 2005 did in fact have higher payments to their auditors. While this effect disappeared when the smallest companies were excluded, it reappeared, at least for 2005, when the sample was restricted to contain only the smaller companies. Based on this, we conclude that the smaller companies have had higher non-audit costs in the years up to their transition to IFRS reports. The larger and more complex companies did not experience the same effect, probably because their accounting departments are staffed by better skilled personnel so they could do a larger part of the IFRS related work internally.

Based on our findings we could expand our research by examine the internal costs of the companies. This could shed additional light on the probable reasons for our mixed results reporting the cost of non audit services. Furthermore, it would be interesting to examine whether there are any differences in the audit cost functions between mandated and not mandated IFRS reporting companies. This is difficult to do on Danish data, due to the fact that the numbers of not mandated IFRS reporting Danish companies is very low.

Endnotes:

[1] The Institute of Chartered Accountants in England and Wales (2007): EU implementation of IFRS and the Fair Value Directive.

[2] According to *the Danish Financial Statements Act* large companies fulfill at least two of the following three criteria: total assets larger than 143 million Danish kroner, revenues larger than 286 million Danish kroner and more than 250 employees. Companies listed on the Copenhagen Stock Exchange are also included in the sample. All companies eligible for the sample shall according to *the Danish Financial Statements Act* disclose their costs of auditing as well as non-auditing services provided by their auditor(s).

[3] After deleting a number of cases where the financial statements, although required by law, did not disclose audit fees.

[4] One reason might be that firms are seeking to minimize their audit costs.

[5] If a company changes from two to only one auditor, it is only considered as a change of auditor if none of the two audit firms continue as auditors in the following year. A change of auditor only is registered if the current year's auditor was not engaged in the former year's audit.

[6] The IFRS variable in this step and the other IFRS variables in the following steps are forced into the model on top of the stepwise entered control variables.

[7] The specific results can be obtained from the authors.

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Tables and figures:

Table 1. List of included variables. [a)]

Dependent variables:	
AUDITFEE	= Audit fee
AUDITORPAY	= Audit fee + Fee for non-audit auditor services
Control variables (entered stepwise):	
LOGREV	= Log_{10}(Revenues)
LOGSUB	= Log_{10}(Number of subsidiaries + 1)
INCENT	= 1 if share based incentive program; 0 otherwise
INVENT	= Inventories/Total assets
INTANG	= Intangible fixed assets/Total assets
TANGIB	= Tangible fixed assets/Total assets
TURN10	= 1 if Revenues/Total assets between 1.0 and 1.5; 0 elsewhere
TURN15	= 1 if Revenues/Total assets between 1.5 and 2.0; 0 elsewhere
TURN20	= 1 if Revenues/Total assets greater than 2.0; 0 elsewhere
LISTED	= 1 if company shares are listed on Copenhagen Stock Exchange
AUDNUM	= Number of elected auditor firms
CHGAUDNUM	= 1 if number of auditors have changed from last year; 0 elsewhere
CHGAUD	= 1 if at least one auditor has been changed from last year; 0 elsewhere
BIG4	= 1 if at least one auditor is a big 4 audit firm; 0 elsewhere
AUDREG	= 1 if year ≥ 2005
PROFIT	= Net income/Total assets
EQUITY	= Book value of equity/Total assets
LOGFINEXP	= Log_{10}(Financial expenses)
IFRS-variables:	
IFRS	= 1 if IFRS-statement; 0 elsewhere
IFRS×LOGREV	= IFRS × LOGREV
IFRS×LOGSUB	= IFRS × LOGSUB
IFRS×INTANG	= IFRS × INTANG
IFRSTWO	= 1 if two years ago was the first with IFRS statement; 0 elsewhere
IFRSLAST	= 1 if last year was the first with IFRS statement; 0 elsewhere
IFRSFIRST	= 1 if this year is the first with IFRS statement; 0 elsewhere
IFRSNEXT	= 1 if next year is the first with IFRS statement; 0 elsewhere
IFRS2004	= 1 if IFRS statement and Year=2004; 0 elsewhere
IFRS2005	= 1 if IFRS statement and Year=2005; 0 elsewhere
IFRS2006	= 1 if IFRS statement and Year=2006; 0 elsewhere
IFRS2007	= 1 if IFRS statement and Year=2007; 0 elsewhere

[a)] All accounting variables are calculated from the highest possible level; i.e. from consolidated accounts whenever these were available and from parent/single company accounts in all other cases.

Table 2. Dependent variable: AUDITFEE. Full sample (n = 1,593)

	A			B			C		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-18,931.092	-26.410	***	-12,341.830	-14.494	***	-13,624.428	-16.246	***
LOGREV	3,457.182	25.701	***	2,286.953	14.587	***	2,580.618	16.598	***
LOGSUB	1,301.453	7.349	***	1,378.853	8.179	***	761.984	4.244	***
INCENT	586.508	2.796	***	631.859	3.166	***	711.621	3.634	***
INTANG	3,123.493	4.700	***	3,594.162	5.676	***	1,539.927	1.991	**
TURN10	-1,256.208	-6.850	***	-1,240.024	-7.107	***	-1,268.750	-7.448	***
TURN15	-1,393.307	-6.582	***	-1,338.812	-6.647	***	-1,367.103	-6.971	***
TURN20	-1,543.703	-7.619	***	-1,323.020	-6.837	***	-1,466.848	-7.770	***
LISTED	1,362.568	5.962	***	1,487.552	6.835	***	1,696.476	7.476	***
AUDREG	-289.399	-1.943	*	-205.916	-1.452	ns	-260.439	-1.845	*
IFRS	-115.676	-.432	ns	-16,547.854	-12.758	***	-12,773.425	-8.942	***
IFRS×LOGREV				2,723.211	12.921	***	1,355.294	5.223	***
IFRS×INTANG							4,211.789	3.288	***
IFRS×LOGSUB							3,563.585	8.657	***
IFRSTWO							-261.896	-.493	ns
IFRSLAST							85.889	.160	ns
IFRSFIRST							365.546	.612	ns
IFRSNEXT							-24.126	-.070	ns
IFRS2004							844.168	1.062	ns
IFRS2005							48.470	.076	ns
IFRS2006							789.098	1.345	ns
IFRS2007							371.331	.658	ns
R squared	0.585			0.625			0.648		
Adj. R squared	0.582			0.622			0.644		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level

Table 3. Dependent variable: AUDITORPAY. Full sample (n = 1,593).

	A			B			C		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-36,412.005	-24.501	***	-26,381.589	-14.592	***	-28,722.838	-16.030	***
LOGREV	6,708.519	24.054	***	4,927.155	14.802	***	5,466.926	16.458	***
LOGSUB	2,406.021	6.553	***	2,523.842	7.052	***	1,402.123	3.655	***
INCENT	1,453.963	3.344	***	1,522.998	3.594	***	1,720.110	4.111	***
INTANG	7,819.898	5.676	***	8,536.368	6.349	***	4,395.183	2.660	***
TURN10	-2,958.352	-7.781	***	-2,933.716	-7.920	***	-2,978.529	-8.184	***
TURN15	-3,308.160	-7.538	***	-3,225.206	-7.541	***	-3,270.593	-7.806	***
TURN20	-3,427.104	-8.159	***	-3,091.173	-7.524	***	-3,361.125	-8.334	***
LISTED	2,705.503	5.710	***	2,895.759	6.267	***	3,358.802	6.928	***
AUDREG	-692.440	-2.243	**	-565.359	-1.878	*	-682.737	-2.264	**
IFRS	-1,012.974	-1.825	*	-26,026.636	-9.451	***	-20,215.804	-6.624	***
IFRS×LOGREV	N/A			4,145.371	9.264	***	1,671.451	3.015	***
IFRS×INTANG	N/A			N/A			8,861.567	3.238	***
IFRS×LOGSUB	N/A			N/A			6,430.976	7.312	***
IFRSTWO	N/A			N/A			281.019	.247	ns
IFRSLAST	N/A			N/A			-34.630	-.030	ns
IFRSFIRST	N/A			N/A			29.167	.023	ns
IFRSNEXT	N/A			N/A			-424.358	-.574	ns
IFRS2004	N/A			N/A			3,239.318	1.908	*
IFRS2005	N/A			N/A			1,988.574	1.466	ns
IFRS2006	N/A			N/A			2,109.895	1.683	*
IFRS2007	N/A			N/A			1,184.679	.983	ns
R squared	.555			.578			.600		
Adj. R squared	.553			.575			.595		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level

Table 4. Dependent variable: AUDITFEE. Excluding small companies (n = 1,279).

	A			B			C		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-25,954.353	-27.664	***	-17,255.475	-14.919	***	-19,029.622	-16.606	***
LOGREV	4,437.109	21.166	***	2,869.197	11.986	***	3,266.818	13.731	***
LOGSUB	1,198.882	5.954	***	1,329.263	6.940	***	695.163	3.396	***
INVENT	-1,082.194	-2.184	**	-1,150.176	-2.444	**	-1,153.835	-2.511	**
INTANG	2,981.288	3.782	***	3,179.683	4.247	***	1,127.931	1.235	ns
TURN10	-1,235.596	-5.935	***	-1,178.114	-5.958	***	-1,227.822	-6.351	***
TURN15	-1,628.432	-6.407	***	-1,408.445	-5.819	***	-1,449.569	-6.139	***
TURN20	-2,165.573	-8.116	***	-1,633.971	-6.349	***	-1,856.344	-7.366	***
LISTED	934.299	3.672	***	1,383.921	5.657	***	1,588.994	6.141	***
PROFIT	-1,448.093	-2.151	**	-1,677.722	-2.623	***	-1,700.862	-2.718	***
LOGFINEXP	350.781	2.255	**	419.427	2.838	***	394.209	2.732	***
IFRS	-26.795	-.101	ns	-19,593.594	-11.677	***	-14,972.261	-8.335	***
IFRS×LOGREV	N/A			3,154.371	11.794	***	1,701.811	5.366	***
IFRS×LOGSUB	N/A			N/A			3,359.674	7.569	***
IFRS×INTANG	N/A			N/A			4,230.422	2.789	***
IFRSTWO	N/A			N/A			-242.544	-.415	ns
IFRSLAST	N/A			N/A			-89.210	-.148	ns
IFRSFIRST	N/A			N/A			-209.935	-.319	ns
IFRSNEXT	N/A			N/A			21.676	.054	ns
IFRS2004	N/A			N/A			1,262.856	1.495	ns
IFRS2005	N/A			N/A			354.429	.514	ns
IFRS2006	N/A			N/A			724.816	1.107	ns
IFRS2007	N/A			N/A			431.749	.693	ns
R squared	.636			.672			.692		
Adj. R squared	.633			.669			.687		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level

Table 5. Dependent variable: AUDITORPAY. Excluding smallest cases (n = 1,279).

	A			B			C		
	Coefficients	t	Sig.	Coefficients	t	Sig.	Coefficients	t	Sig.
(Constant)	-49,831.725	-25.348	***	-37,377.224	-14.990	***	-40,725.178	-16.399	***
LOGREV	8,557.267	19.481	***	6,312.430	12.232	***	7,056.448	13.685	***
LOGSUB	2,225.967	5.275	***	2,412.638	5.843	***	1,273.356	2.871	***
INVENT	-2,509.414	-2.417	**	-2,606.746	-2.569	**	-2,720.791	-2.732	***
INTANG	8,080.205	4.892	***	8,364.255	5.182	***	3,782.884	1.911	*
TURN10	-2,969.053	-6.807	***	-2,886.754	-6.772	***	-2,956.675	-7.057	***
TURN15	-3,837.638	-7.206	***	-3,522.674	-6.750	***	-3,573.030	-6.982	***
TURN20	-4,641.662	-8.302	***	-3,880.548	-6.994	***	-4,289.495	-7.854	***
LISTED	2,128.184	3.991	***	2,771.925	5.256	***	3,263.426	5.820	***
PROFIT	-2,906.219	-2.060	**	-3,234.987	-2.346	**	-3,280.657	-2.419	**
LOGFINEXP	710.167	2.179	**	808.450	2.537	**	772.361	2.470	**
IFRS	-1,013.151	-1.831	*	-29,027.653	-8.024	***	-21,713.791	-5.577	***
IFRS×LOGREV	N/A			4,516.228	7.832	***	1,878.382	2.733	***
IFRS×LOGSUB	N/A			N/A			5,986.438	6.223	***
IFRS×INTANG	N/A			N/A			10,325.623	3.142	***
IFRSTWO	N/A			N/A			518.357	.410	ns
IFRSLAST	N/A			N/A			-76.079	-.058	ns
IFRSFIRST	N/A			N/A			-868.613	-.609	ns
IFRSNEXT	N/A			N/A			-392.562	-.455	ns
IFRS2004	N/A			N/A			4,305.506	2.352	**
IFRS2005	N/A			N/A			2,492.012	1.667	*
IFRS2006	N/A			N/A			1,654.904	1.166	ns
IFRS2007	N/A			N/A			1,084.340	.804	ns
R squared	.603			.621			.640		
Adj. R squared	.600			.618			.634		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level

Table 6. Dependent variable: AUDITFEE. Excluding largest cases (n = 1,278).

	A			B			C		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-3,186.168	-15.163	***	-2,788.555	-11.174	***	-2,845.918	-11.738	***
LOGREV	600.134	15.889	***	528.901	11.803	***	548.037	12.575	***
LOGSUB	440.177	10.170	***	440.012	10.197	***	333.550	7.575	***
INCENT	224.140	3.823	***	221.613	3.791	***	198.429	3.377	***
INTANG	523.050	3.200	***	602.242	3.646	***	379.226	2.034	**
TURN20	-112.883	-3.054	***	-95.705	-2.565	**	-108.432	-2.991	***
LISTED	484.717	8.863	***	473.501	8.662	***	468.094	8.212	***
CHGAUDNUM	-192.123	-1.998	**	-173.286	-1.803	*	-100.443	-.927	ns
IFRS	7.286	.105	ns	-1,229.358	-2.877	***	-618.061	-1.333	ns
IFRS×LOGREV	N/A			223.274	2.932	***	16.060	.193	ns
IFRS×LOGSUB	N/A			N/A			1,126,543	7.815	***
IFRS×INTANG	N/A			N/A			331,701	.898	ns
IFRSTWO	N/A			N/A			-256,030	-1.477	ns
IFRSLAST	N/A			N/A			-79,098	-.492	ns
IFRSFIRST	N/A			N/A			142,142	.758	ns
IFRSNEXT	N/A			N/A			101,734	1.127	ns
IFRS2004	N/A			N/A			-399,562	-1.487	ns
IFRS2005	N/A			N/A			-586,010	-2.658	***
IFRS2006	N/A			N/A			-359,406	-1.936	*
IFRS2007	N/A			N/A			-170,746	-.909	ns
R squared	.383			.387			.428		
Adj. R squared	.379			.383			.420		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level

Table 7. Dependent variable: AUDITORPAY. Excluding largest cases (n = 1,278).

	A			B			C		
	Coefficient	t	Sig.	Coefficient	t	Sig.	Coefficient	t	Sig.
(Constant)	-4,666.825	-14.157	***	-4,351.775	-11.087	***	-4,407.008	-11.472	***
LOGREV	858.279	14.193	***	802.138	11.234	***	818.088	11.703	***
LOGSUB	714.069	10.395	***	713.674	10.394	***	589.823	8.387	***
INCENT	564.359	6.117	***	561.951	6.093	***	471.297	5.041	***
INTANG	814.178	3.176	***	875.975	3.374	***	631.715	2.138	**
TURN20	-156.879	-2.676	***	-143.549	-2.421	**	-157.310	-2.711	***
LISTED	687.181	8.035	***	679.008	7.927	***	667.084	7.422	***
BIG4	168.209	2.203	**	166.588	2.183	**	197.316	2.635	***
IFRS	59.406	.572	ns	-915.060	-1.370	ns	280.459	.383	ns
IFRS×LOGREV	N/A			176.502	1.477	ns	-88.935	-.677	ns
IFRS×LOGSUB	N/A			N/A			1,325.811	5.791	***
IFRS×INTANG	N/A			N/A			237.405	.405	ns
IFRSTWO	N/A			N/A			-833.869	-3.042	***
IFRSLAST	N/A			N/A			-517.899	-2.030	**
IFRSFIRST	N/A			N/A			-339.083	-1.141	ns
IFRSNEXT	N/A			N/A			185.377	1.297	ns
IFRS2004	N/A			N/A			-523.171	-1.229	ns
IFRS2005	N/A			N/A			-559.901	-1.676	*
IFRS2006	N/A			N/A			-396.077	-1.346	ns
IFRS2007	N/A			N/A			-54.925	-.185	ns
R squared	.399			.400			.431		
Adj. R squared	.395			.395			.423		

ns	Not significant
*	Significant at 10% level
**	Significant at 5% level
***	Significant at 1% level