THE PERTINENCE OF AUDIT AND NON-AUDIT FEES AS USEFUL INFORMATION FOR INVESTORS

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Abstract: The objective of this study is to evaluate the pertinence of audit and non-audit fees for investors in Canada. Results from a sample of companies between 2005 and 2010 show that higher ratios of non-audit service fees to audit fees, are perceived negatively by investors.

I. Introduction

The reputation of auditors independence was severely shaken by the financial scandals at the end of the 1990's by companies such as Enron, Worldcom, and Parmalat. Regulatory authorities reacted by proposing new standards to ensure the independence of auditors. Consequently, in November 2000, the Securities and Exchange Commission (SEC), the regulatory body for financial securities in the United States, required that companies publish the audit and non-audit fees that they pay to allow investors to better evaluate the auditor's independence. Subsequently, Canadian regulators adopted the same disclosure requirements.

There are two schools of thought regarding the signals that can be sent to investors by significant non-audit fees compared to audit fees. One line of thinking believes that this signals a problem of independence for the auditing firm and that this would have the effect of hindering the credibility of financial statements (Frankel *et al.*, 2002). Another line of thinking considers that the significant non-audit service fees would have the effect of increasing the confidence level towards financial statements.

According to this argument, significant non-audit fees would imply that the auditing is conducted by a firm that wishes to preserve its reputation in the market for non-audit services (Ashbaugh *et al.*, 2003).

Significant audit fees can also send mixed signals to investors. Significant audit fees can signal a high quality audit. In such a case, significant fees may instill greater confidence towards the financial information (Antle *et al.*, 2006). However, significant audit fees may also signal to investors that the risk of uncertainties in the accounting information is higher than anticipated, thus requiring more exhaustive auditing (Bédard and Johnstone, 2004). In this case, a significant audit would be treated negatively by the market. As we will see further, some authors also believe that significant total audit and non-audit fees can engender an independence problem for the auditor in the same manner that high non-audit fees alone could generate.

Numerous studies have examined audit and non-audit fees. These studies focus on different subjects such as financial statement restatements (Raghunandan *et al.,* 2003), earning management (Frankel *et al.* 2002; Asbaugh *et al.* 2003; Chung and Kallapur, 2003; Antle and Gordon, 2006), opinion on the on-going concern (Defond *et al.* 2002) and audit fees of previous exercises (Chouaya, 2008). However, to the best of our knowledge, no study had attempted to establish a link between the market value of companies and the audit and non-audit fees. In the present study, we use a valuation model similar to that of Ohlson (1995), in order to evaluate the perception of investors regarding the information on audit and non-audit fees of Canadian companies that integrate the S&P/TSX 60 index. Our sample includes all companies listed on the S&P/TSX 60 index on December 31, 2010, and extends over a period of six years, between 2005 and 2010.

Our study contributes to previous literature by including new empirical observations of audit fees and non-audit fees. Its originality lies in the fact that it examines the effect of information transmitted by audit and non-audit fees on the market value of companies. Moreover, this study uses Canadian data while few Canadian studies have examined the issue of audit and non-audit fees.

The results of the study show that the market value of companies listed on the S&P/TSX 60 index is negatively influenced by significant non-audit fees as compared to audit fees. This result supports the school of thought proposing that significant non-audit fees can signal an auditor's lack of independence. At the same time, the results of the study do not allow us to establish a link between audit fees and the market value of companies.

The present article is organized as follows. The first section presents the existing studies and the formulation of hypotheses. Afterwards, the methodology and the data utilized are described in detail. Subsequently, we discuss the study results and present the conclusions of our study, its limits, and avenues for future research.

II. A review of previous studies and hypotheses

Investors find in the audit some degree of security concerning the reliability of the financial information. The level of security depends on the perception that investors have of the audit quality. According to DeAngelo (1981), audit quality depends on the ability of the auditors to be sufficiently skillful to identify the inaccuracies pertaining to the financial information, and sufficiently independent to expose and correct such inaccuracies. Research on auditor's independence is considerably more preponderant than one's on competency. This is due to the fact that there is more available public information enabling investors to assess the independence between the auditor and the entity being audited than there is information to evaluate the competence of auditors. The SEC's requirement regarding the

disclosure of audit and non-audit fees was mainly destined to help investors to form an informed opinion on the independence of the auditors (Raghunandan *et al*., 2003).

i- Hypothesis regarding non-audit service fees for evaluation of auditor independence

There are two major schools of thought regarding the evaluation of auditors' independence. The first of these visions considers that auditor's independence is measured by the total amount of auditor fees generated, regardless of whether or not they are related to audit (Ashbaugh *et al*. 2003). In this case, it is the risk of losing all of the audit and non-audit fees that affects the judgement of the auditor. However, it has to be noted that this school of thought is not the most widely held because many studies have found results contradicting it. In fact, the most commonly held view is based on the importance of the non-audit service fees vis-à-vis the audit fees (Frankel *et al*, 2002; Simunic, 1984; Beck *et al.*, 1988 and DeFond and Surammanyam, 1998). According to this reasoning, non-audit service fees hinder independence because the auditor could become deliberately complaisant (agency theory) or simply complaisant (behavioral literature) with the entity being audited in order to maintain consulting contracts (Frankel *et al.*, 2002). Even if either of the preceding theories can explain auditors' biases, the relationship between significant non-audit service fees and earning management remains the same. In fact, in both cases, the auditor is likely to yield to pressure from clients when professional fees related to non-audit service fees involve significant income for the company offering the audit services (Frankel *et al.,* 2002).

According to the previous analysis, auditor's objectivity can be compromised by significant non-audit fees and the wish to avoid antagonizing the audited firm in order to maintain the business relationship (Simunic, 1984 and Beck *et al.,* 1988). For example, in the case of the Enron financial scandal, the auditing firm was receiving audit fees of 25 million dollars and non-audit service fees of 27 million dollars (Kinney and Libby, 2002). Many observers hinted that the auditor Arthur Andersen was confronting a problem of independence. The focus is on non-audit fees because it is easier for the audited not to renew non-audit contracts than audit ones. This can be explained by the fact that an audited firm may find it quite difficult to dismiss its auditor, even if the latter is not accommodating on earning management, because changing auditors can send a negative signal to investors (DeFond and Subramanyam, 1998). The results by Frankel *et al.* (2002) support the view that a diminished independence is associated with significant non-audit fees, as the latter may be linked with more significant discretionary accruals and a reduction in share value. Furthermore, the study by DeFond *et al.,* 1998, finds a positive relationship between the change of auditors and earnings management.

Arruñada (1999) proposes that the auditors strongly involved in non-audit services would have a great desire to preserve their reputation, in order to ensure that their ability to sell their services to the rest of their clients is not compromised by satisfying anyone in particular. If investors held this view, the credibility of accounting information provided by companies presenting significant non-audit service fees is favorably increased. Therefore the stock value of these companies should benefit from the investors' confidence on the accounting information they use for their analyses (Frankel *et al.,* 2002).

Hence, it is suggested by the first hypothesis of this study that there should be a negative relation between non-audit service fees and the stock value. Note that this hypothesis is coherent with the predominant view that this type of fee results in an independence loss for the auditor (Frankel *et al.*, 2002; Simunic, 1984; Beck *et al.*, 1988 and DeFond and Subramanyam, 1998).

Hypothesis 1: *The market value of companies is negatively related to the ratio of non-audit service fees to audit fees.*

Should it happen that the relation be positive and significant, we would have to retain the alternative explanation, stating that a much greater independence to protect the reputation of the auditor is associated with important non-audit fees and that consequently the company market value is positively impacted by higher ratios of non-audit to audit fees.

ii- Hypotheses regarding audit fees and the measurement of audit quality

We have already talked about the possible relation between substantial audit fees and the auditors' independence, but besides that link, the literature also documents a connection between substantial audit fees and audit quality. In relation to audit quality, significant audit fees can be seen in two different ways by investors. First, audit fees can be perceived as a sign of high quality work. In fact, auditors can perform audit extensive work when they wish to protect their reputation and limit the risk of litigation associated with potential manipulation risks by the firm being audited (St. Pierre and Anderson 1984; Palmrose 1987; Becker *et al.* 1998; Heninger 2001). Concerning this point, Frankel *et al.* (2002) found that earning management was less important when significant audit fees were higher. According to this interpretation, higher fees increase the confidence of investors regarding accounting information. This greater confidence should be reflected in lesser risk perception and therefore a positive relation between audit fees and stock value.

On the contrary, significant audit fees can decrease investor confidence in the accounting information. According to Bédard and Johnstone*,* 2004, significant audit fees can arise because the audit firm estimates that the risks of inaccurate financial data are more important, thus increasing the risk of judicial litigation. The results found by Antle *et al.* (2006) support this view, exhibiting a positive and significant relation between audit fees and earning management. In this case, the signal sent to markets is that the accounting information is less reliable. Such a lesser confidence vis-à-vis the accounting information increases the risk of investing in the company and will have a negative effect on the stock value. In addition, significant audit fees can also compromise the independence of the auditor according to the hypothesis proposed by Ashbaugh *et al.* (2003). This will decrease the credibility of the accounting information and will have a negative effect on the market value of the company.

Thus the second hypothesis elaborated in the present study recognizes a negative association between significant audit fees and the quality of the audit. Hence, we expect the following relationship:

Hypothesis 2a): There exists a negative relation between audit fees and company market value.

It has been said that the quality of the audit depends on the capacity of the auditors to identify the inaccuracies of financial information, and having the necessary independence to demand the correction of these inaccuracies (DeAngelo, 1981). Thus, hypothesis 2a conforms to the provision for risks of judicial litigation (Bédard and Johnstone, 2004) and the loss of independence (Ashbaugh *et al.,* 2003) that should have a negative effect on the market value of the company.

In the event that the results show a significant positive relation, we would have to conclude that high audit fees are a sign that it is the high quality of work conducted during the audit that take precedence and thus are predominant.

The same model will be re-examined by considering abnormal audit fees instead of standard audit fees. This more sophisticated model will allow us to consider if investors react to what could be expected in terms of audit fees considering the characteristics of the company.

Hypothesis 2 b): There is a negative relation between abnormal audit fees and the company market value.

The abnormal audit fees will be established by the difference between the actual audit fees and those established by model estimate. The estimate will take into account the size, complexity, and the inherent risk of the company. These parameters were retained from the meta-analysis of Hay *et al.* (2006). We shall discuss, to a greater extent, the estimate of abnormal audit fees in the next section.

III. Model, methodology, and sample

The model employed in this study is based on Ohlson's (1995) design. The model, presented in equation 1, uses two fundamental variables to explain the price of a share; the accounting value of shareholder's common equity ($BV_{i,t}$) and the company's earnings ($EAR_{i,t}$). The variables associated with the research hypotheses are then added to equations 2 and 3. The three equations are presented below:

$$MV_{i,t} = \beta_0 + \beta_1 BV_{i,t} + \beta_2 EAR_{i,t} + \varepsilon_{i,t} \tag{1}$$
$$MV_{i,t} = \beta_0 + \beta_1 BV_{i,t} + \beta_2 EAR_{i,t} + \beta_3 NAFR_{i,t} + \beta_4 AF_{i,t} + \varepsilon_{i,t} \tag{2}$$
$$MV_{i,t} = \beta_0 + \beta_1 VCA_{i,t} + \beta_2 BEN_{i,t} + \beta_3 NAFR_{i,t} + \beta_4 AAF_{i,t} + \varepsilon_{i,t} \tag{3}$$

where

$MV_{i,t}$	=	market value of firm *i* six months after year-end *t*;
$BV_{i,t}$	=	book value of common equity of firm *i* at year-end *t;*
$EAR_{i,t}$	=	earnings available to common shareholders of firm *i* at year-end *t* ;
$NAFR_{i,t}$	=	ratio of non-audit fees to audit fees of firm *i* at the year-end *t* ;
$AF_{i,t}$	=	Natural logarithm of the audit fees of firm *i* at the year-end *t* ;
$AAF_{i,t}$	=	abnormal audit fees of firm *i* at the year-end *t* ;
$\varepsilon_{i,t}$	=	error term.

Note that we anticipate positive and significant coefficients for $BV_{i,t}$ and $EAR_{i,t,}$ for all three equations. Equation 2 adds to the base model the ratio of non-audit fees to audit fees ($NAFR_{i,t}$) and audit fees ($AF_{i,t}$). This equation allows testing hypotheses 1 and 2a by examining the coefficients associated with each of these variables. The expected coefficient is negative in the case of the ratio of non-audit to audit fees, as suggested by the stream of literature proposing that independence diminishes with higher non-audit fees. We also anticipate a negative coefficient for the audit fees because it is an indicator of risk of judicial litigation confronted by the auditors or a lessened independence of the auditor vis-à-vis the entity being audited. In order to estimate the added explanatory power of these two independent variables, the R^2 of equation 2 will be compared with equation's 1. Finally, in equation 3, audit fees are replaced by abnormal audit fees ($AAF_{i,t}$) in order to test hypothesis 2b. The anticipated coefficient of abnormal non-audit fees – as well as that of audit fees– is negative because the hypothesis states that there is a link between costs and a higher audit risk. The results of the third equation are analyzed in the same fashion as those of the second equation.

We should highlight that the abnormal audit fees in equation 3 are calculated by taking the difference between the normal theoretical audit fees and the actual audit fees. The normal theoretical audit fees are determined on the basis of indicators for size, complexity, and company's inherent risk. According to the meta-analysis of Hay *et al.,* 2006, these are the most pertinent criteria for estimating the variability of the audit fees. In fact, let us note that size, by itself, explains up to 70% of the variability of the audit fees (Hay *et al.*; 2006).

The natural logarithm of total assets is the metric for firm size, allowing us to consider the economies of scale prevalent in an audit. Total assets were the most common indicator for size, appearing in 76 studies in the meta-analysis conducted by Hay *et al.* (2006). For purposes of comparison, the second most used metric is total sales, which is only considered in 15 studies. According to Hay *et al.* (2006), the most frequently measurements used to assess complexity are, by order of importance, number of subsidiaries, number of foreign subsidiaries, the number of SIC codes applied to the company, and number of business segments. The available information on Canadian firms does not allow us to easily identify subsidiaries and Canadian securities are mainly concentrated in natural resources. Consequently, the retained indicator will be the sum of the number of business and geographic segments as revealed in the notes on segmented results of operations. The meta-analysis conducted by Hay *et al.* (2006) established that the most frequently used measurement of inherent risk is the sum of receivables and inventory. We have instead opted to estimate inherent risk by the ratio of net fixed assets to total assets. The rationale for this choice is based on the assertion that fixed assets are among the less risky balance sheet's items. Consequently, we anticipate a negative relation between the abovementioned ratio and audit fees. The following model is used to estimate normal audit fees:

$$NAF_{i,t} = \beta_0 + \beta_1\, LNAssets_{i,t} + \beta_2\, NSectors_{i,t} + \beta3\, NCA_{i,t} + \varepsilon_{i,t} \qquad (4)$$

Where

$NAF_{i,t}$	= Normal audit fees of firm *i* at the year-end *t* ;
$LNAssets_{i,t}$	= Natural logarithm of assets of firm at the year-end *t*;
$NSectors_{i,t}$	= The sum of the business and geographical segments of firm *i* at the year-end;
$NCA_{i,t}$	= The ratio of net fixed assets to total assets of firm *i* at the year-end ;
$\varepsilon_{i,t}$	= error term.

The regression analysis is employed to estimate the model coefficients using sample data. The normal audit fees are then calculated by employing these coefficients. Afterwards, the normal audit fees are subtracted from the actual fees to identify the abnormal audit fees that are used in turn as an independent variable to explain the market value of companies.

Table1. Statistical analysis of the model for estimating normal audit fees

Variables[1]	Coefficients	t [2]
Constant	-56,322,573	-15.75***
LNAssets	2,590,715	17.11***
NSectors	319,056	5.18***
NCA	-1,903,508	4.18***
N	330	
R²	0.75	
R²-adjusted	0.58	
Durbin-Watson	0.52	

[1] $NAF_{i,t}$ = Amount of normal audit fees t in exercise t for company i; $LNAssets_{i,t}$ = Natural logarithm of the total assets of exercise t for company i; $NSectors_{i,t}$ = The sum of the number of business and geographical segments of the company according to the note on sector-based information in the 2010 financial statements of company i; $NCA_{i,t}$ = The percentage of net fixed assets to the total assets of exercise t of company i.

[2] $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.1$ (Unidirectional test when the sign is known)

The results of our calculation of abnormal audit fees are shown in Table 1. The model was significant and able to explain 58% of audit fees for companies included in our sample. In addition, the three variables are shown to be significant. Finally, it should be noted that the results presented in Table 1 indicate that the ratio of net fixed assets to total assets, intended to convey information about a lesser inherent risk, was linked to smaller audit fees. Hence, the coefficient associated with this variable is negative and significant. It is important to highlight that the meta-analysis conducted by Hay *et al.* (2006) did not identify any research that used this variable and that a more recent literature review did not find either any article employing it. The ratio of net fixed assets to total assets as a factor that reduces inherent risk is, consequently, a new variable that future research may consider to estimate audit fees.

Sample

The sample comprises the constituent companies of the S&P/TSX 60 index as of July 1st, 2011. This index includes the largest Canadian public companies. The sample covers a period of six years; specifically, the fiscal exercises between 2005 and 2010. The number of possible observations is therefore 360. Of this number, 30 observations were removed due to missing information.

The value of common shares was obtained from the Thomson Reuters database. Book value, profits, total assets, the number of business and geographic segments, net fixed assets, and the number of common shares were taken from the financial statements consulted on the SEDAR website. The non-audit service fees and the audit fees were compiled from information circulars that were also consulted on the same website.

IV. Results

a) Descriptive analysis

The descriptive statistics of the different variables used in our analysis are shown in Table 2. The size of companies measured by both the market value and the book value, shows substantial spreads between the smallest and the largest companies. The average market value is 17.8 billion Canadian dollars, with a standard deviation of 15.9 billion. The smallest market capitalization is 1.2 billion (Yellow Media in 2011) while the largest is 78.6 billion (Royal Bank in 2011). Book value extremes oscillate between a minimum of 39 million (Tim Hortons in 2005) and a maximum of 42.3 billion (TD Bank in 2010). The average book value is 8.4 billion with a standard deviation spread of 7.2 billion. The average net annual profit is 1.1 billion with the widest difference ranging from a negative 4.2 billion (Barrick Gold in 2009) to 5.9 billion (Encana in 2008).

On average, companies in the sample spend in consulting services $0.41 per dollar of audit fees. It is interesting to mention, for the purpose of comparison, that Frankel *et al.* (2002) found that non-audit service fees represented approximately 70% of total audit fees in a sample of American companies having published their proxy statements in 2001. The analysis of the data in the present study indicates that the smallest ratio was exhibited by TransAlta in 2005. In fact, in 2005, TransAlta only paid a sum of $6,250 in non-audit fees compared to audit fees of over 2 million dollars. The highest ratio, 2.37, belongs to Shoppers Drug Mart in 2010. The average audit fees of companies comprising the S&P/TSX 60 Index were 5.5 million with a standard deviation of 6.4 million for the six years studied. The highest audit fees paid (27.6 million) was exhibited by Manulife Financial in 2006, while the smallest fee, $203,000, was paid by Canadian Oil Sands in 2005.

Table 2. Descriptive Analysis of Data[3]

Variables[4]	Minimum	Maximum	Average	Standard deviation
MV	1,238	78,556	17,800	15,900
BV	39	42,302	8,380	7,827
EAR	4,274	5,944	1,120	1,274
NAFR	0	2.37	0.41	0.341
AF	0.2	27.6	5.5	6.4
N	330			

b) Basic model to explain the market value of a company

The results of the regressions are shown in Table 3. Beginning with the results of equation 1, we note that the two variables of the base model, $BV_{i,t}$ and $EAR_{i,t}$, are significant and explain 65.8 % of the variance in the market value of companies. According to the VIF-statistic values, the regression is not affected by a bias due to the collinearity of the independent variables. Thus, it is possible to conclude, on the basis of this regression analysis, that the two basic variables suggested by Ohlson (1995) sufficiently explain the market value of companies in the sample.

Table 3. Statistical Analysis of Base Model Analysis

Explanatory Variables[5]	Expected Sign	Equation 1 Coefficient[6]	t	Equation 2 Coefficient	t	Equation 3 Coefficient[7]	t
Constant		3.828[3]	5.04[***]	9.515[3]	1.03	5.354[3]	4.84[***]
BV	+	1.15	12.85[***]	1.14[***]	10.44[***]	1.12	11.91[***]
EAR	+	3.86	7.00[***]	3.85[***]	6.98[***]	3.86[***]	6.97[***]
NAFR	-			-3.107[3] [**]	-1.98[**]	-3.010[3] [*]	-1.93[**]
AF	-			-289.5[3]	-0.45		
AAF	-					-9.42	-0.07
N		330		330		330	
R²		0.658		0.663		0.662	
Increase in R^2		0.658[***]		0.004		0.004	
Adjusted R²		0.656		0.658		0.658	
Durbin-Watson		1.08		1.08		1.08	

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[3] With the exception of the variable NAFR, financial data are stated in thousands of Canadian dollars.

[4] $MV_{i,t}$ = The market value of common shares of company i six months after the closing date for financial statements of exercise t multiplied by the number of common shares in circulation at the end of exercise t ; $BV_{i,t}$ = The book value of the assets of ordinary shareholders of company i at the end of exercise t; $EAR_{i,t}$ = The net profit of company i for exercise t; $NAFR_{i,t}$ = The ratio of non-audit fees and audit fees for exercise t of company i; $AF_{i,t}$ = The natural logarithm of audit fees for exercise t and company i.

[5] With the exception of the variable NAFR, financial data are stated in thousands of Canadian dollars.

[6] $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.1$ (unidirectional test when sign is known)

[7] Financial data stated in thousands of Canadian dollars.

In equation 2, the inclusion of variables $NAFR_{i,t}$ and $AF_{i,t}$, linked to the research hypothesis, adds very little to the explanatory power of the model. They increase the adjusted R^{2-} from 0.656 to 0.658. However, this increase in the R^2 is not significant. Considered individually, the ratio of non-audit to audit fees ($NAFR_{i,t}$) presents a negative and significant coefficient. According to this result, hypothesis 1 must be accepted because higher ratios of non-audit fees to audit fees have a negative effect on the market value of companies. This result supports the school of thought proposing that the objectivity and the independence of auditors are compromised by non-audit fees (Frankel *et al.*, 2002; Simunic, 1984; Beck *et al.*, 1988; DeFond and Subramanyam, 1998). It is also compatible with the research by Frankel *et al.* (2002) associating significant non-audit fees with the presence of more important discretionary accruals. Our regression analysis shows as well that the coefficient associated with audit fees ($AF_{i,t}$) turned out to be non-significant for explaining the market value of companies. However, it is important to highlight that perhaps investors may not react to audit fees, but rather to abnormal audit fees. Consequently, equation 3 considers the abnormal audit fees instead of audit fees. The coefficient associated with the abnormal audit fees variable ($AAF_{i,t}$) is not significant. Therefore, it seems that abnormal audit fees, such as those measured by the model, are not considered by investors when assessing the market value for companies. Consequently, hypothesis 2b is not supported by the sample studied and the methodology used. Finally, we note that the increase in R^2 between model 1 and model 2 is not significant.

These results suggest that in the Canadian context, investors frown upon significant ratios of non-audit fees to audit fees. Consequently, the school of thought suggesting that non-audit fees reduce the perceived independence of the auditor prevails over the argument that auditors seeking to keep non-audit revenue will conduct better quality audits for that purpose. The results are consistent with the results of Frankel *et al.* (2002) who found in the American context, a link between non-audit fees and higher discretionary accruals, thus supporting the view that higher non audit fees will lead to auditor's lack of independence. In addition, these results refute those of Ashbaugh *et al.* (2002) which suggested a negative relation between non-audit fees and earnings management.

V. Conclusion

The financial scandals that took place at the end of the 1990s' tarnished investor confidence in financial information and auditor independence. Among the measures that regulatory authorities implemented, there was the requirement for public companies to disclose the audit and non-audit fees that they paid. The aim of this research is to determine whether this information was taken into account by investors to assess the market value of the constituent companies the S&P/TSX 60 index between 2005 and 2010.

On the basis of a model drawing on Ohlson (1995), our results clearly show that investors react negatively to higher ratios of non-audit service fees to audit fees. Many previous research studies already associate significant non-audit service fees to a reduction in auditor independence (Frankel *et al.*, 2002; Simunic, 1984; Beck *et al.*, 1988; DeFond and Subramanyam, 1998). The results of the study tend, therefore, to support and substantiate the requirements of Canadian and American regulatory authorities regarding the public disclosure of non-audit service fees in order to provide investors with the opportunity to better assess the independence of auditors.

The coefficients associated with audit fees and abnormal audit service fees are deemed to be non-significant. The non-significant impact of total audit fees as a measure of audit quality was previously supported by Frankel *et al.* (2002) and by Ashbaugh *et al.* (2003). For their part, Choi *et al.* (2006), found that abnormal audit fees decreased the independence of auditors, measured by more significant discretionary accruals.

This study makes a number of contributions to previous literature on the subject of audit and non-audit fees' informational content. In fact, in addition to supporting certain streams of the existing literature on the topic, this study is also innovative in the sense that, to the best of our knowledge, no study has ever analyzed market perception of audit and non-audit fees. The results tend to indicate that only the non-audit service fees have an influence on the share prices on the market, and could be of interest to diverse market players, such as investors, public companies, regulatory bodies, and auditing firms working for public companies.

As in all research, this study presents certain limits. The article by Hay *et al.* (2006) constitutes an indispensable reference for anyone who would like to improve our model to estimate normal audit fees. It is possible that a more precise measurement of normal audit fees would have resulted in different conclusions regarding the use, by investors, of abnormal audit fees to assess the market value of a company. Also, the introduction of international standards on January 1st 2011 may have led to an increase of non-audit fees and abnormal audit fees during the preceding years before the implementation of the new standards. It is possible that consulting fees were incurred during this transition or that supplementary audit work was necessary in adopting of the new standards to follow. It is therefore likely that these supplementary fees influenced the results of this study. Consequently, a new research study could possibly control for this factor.

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