The Auditor’s Going Concern Opinion Decision: A Pilot Study

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This research attempts to find empirical evidence of ex ante factors relating to the economic trade-offs that an auditor faces when deciding whether or not to disclose going concern uncertainties in an audit report in a non-litigious continental European setting, Belgium. The research methodology consists of univariate and logistic regression analysis. The results of the study confirm the belief that the auditor’s going concern opinion decision is not only a question of competence but also of independence. A significant moderating factor appears to be recent client loss on the part of the auditor. The legal obligation for Belgian auditors to refer to the report of the Board of Directors in their own audit report seems to significantly influence their reporting behaviour. The disclosure by the Board of Directors of ‘bad news’ regarding the state of affairs of a company diminishes any conflict of interest that may exist between the Board and the auditor. However, no evidence was found to justify the fear for a ‘self-fulfilling prophecy’ effect. Copyright © 1999 John Wiley & Sons, Ltd.

Key words: auditors’ opinion decisions; going concern assumption; competence; independence; audit loss; litigation; self-fulfilling prophecy; US/UK vs. Continental Europe (Belgium); report; Board of Directors; statistical analysis

SUMMARY

Auditors’ responsibility for assessing the business prospects of their clients has become the subject of much debate and considerable research. However, nearly all published studies on the going concern opinion decision focus on a British–American context. Moreover, the research questions dealt with are themselves still in debate in the auditing literature and profession. This study attempts to elaborate on this area of research and to apply it in a continental European setting, more specifically in Belgium. The general expectation for Belgium is that auditors will mention fewer going concern problems in their audit reports than their counterparts in the US and the UK. This expectation is based on existing legal and institutional differences between Anglo-Saxon countries and countries in continental Europe. Consequently, the question arises of whether the independence of Belgian auditors is in any way compromised or whether it is safeguarded by other incentives. More in particular, this study attempts to find empirical evidence of ex

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ante factors which may relate to the economic trade-offs that the auditor is confronted with and may, therefore, influence his going concern opinion decision in an environment with low litigation rates.

The results of the study suggest that auditors either do not use a bankruptcy prediction model or that, if they do, it does not influence their going concern opinion decision. This finding confirms the belief that the auditor’s going concern opinion decision is not only a question of competence but also of independence. Indeed, a factor that appears to significantly moderate the auditor’s going concern opinion decision is the loss of audit clients in the previous year. The study also establishes that companies who have switched auditors are more likely to receive a going concern uncertainty disclosure than those who have not. It further appears that the legal obligation for auditors of Belgian companies to refer to the annual report of the Board of Directors in their audit report has a significant impact on the auditor’s reporting behaviour. This finding confirms the expectation that any mention of ‘bad news’ concerning the state of affairs of a company on the part of its Board of Directors will diminish the conflict of interests between the Board and the auditor. Finally, no evidence was found of the much-feared self-fulfilling prophecy effect.

INTRODUCTION

Auditors’ responsibility for assessing the business prospects of their clients has become the subject of much debate and considerable research. However, nearly all published studies on the going concern opinion decision focus on a British–American context. Moreover the research questions dealt with are themselves still in debate in the auditing literature and profession. The current study attempts to elaborate on this research topic and to apply it in a continental European setting, more specifically in Belgium.

Exploring Belgian data is an interesting exercise, as Belgian audit legislation is unique in at least two respects. First, auditors in Belgium are hired for a period of 3 years, rather than just 1 year as in the US and the UK. Second, an auditor in Belgium is obliged to explicitly mention in his audit report whether the annual report of the Board of Directors contains all the information required by law and whether it is in accordance with the annual financial statements. Besides these peculiar features of Belgian audit legislation, the Belgian audit environment—as that in most continental European countries—is relatively non-litigious compared to that in Anglo-Saxon countries.

On the basis of legal and institutional differences between an Anglo-Saxon setting and continental Europe, one would generally expect Belgian auditors to indicate fewer going concern problems in their audit reports than their counterparts in the UK or the US. However, the question also arises of whether the independence of Belgian auditors is perhaps compromised or whether it is safeguarded by other incentives. In particular, this study sets out to find empirical evidence of ex ante factors which may relate to the economic trade-offs that the auditor faces and which may, therefore, influence the auditor’s going concern opinion decision in an environment with low litigation rates. Implemented on 1 January 1998, the revised Belgian Bankruptcy Act, which aims at increasing the auditor’s responsibility by transforming his going concern assessment from a negative to an affirmative duty, may be regarded as an expression of the growing concern in recent years for the auditor’s going concern issue.

RESEARCH OBJECTIVE

It would appear that the question of how the auditor arrives at a going concern decision is, in the first place, a matter of personal competence. Most behavioural studies (based on questionnaires, experiments and archival data) confirm the competence hypothesis, as they indicate that auditors seem to be quite able to identify problem companies (e.g. Kida, 1980; Campisi and Trotman, 1985; Citron and Taffler, 1992; Barnes and Den Huan, 1993). Problem company criteria include: the occurrence of debt rescheduling or reorganization; an inability to meet interest payments; reporting of operational losses, bottom line losses or negative retained earnings for a second or third consecutive year. However, these studies show that, after having identified a problem company, other factors ultimately determine whether or not a going concern qual-
ification is made. Kida (1980) was the first to suggest that a comparison between bankruptcy prediction model accuracy and the rendering of going concern audit reports may be confounded by extraneous variables. His evidence supports the view that the identification of a going concern problem is separated from the decision to actually disclose these uncertainties in the audit report. The auditor’s decision to render a going concern qualification does not appear to depend solely on the recoverability of assets, as professional standards would suggest, nor does it depend on a set of ratios designed to predict bankruptcy. Kida’s results indicate that the possible consequences of the issuance or non-issuance of the going concern audit report may also influence the auditor. In other words, the audit going concern opinion decision is not only a question of competence, but also of independence.

De Angelo (1981b) defines audit quality as ‘the market-assessed joint probability that a given auditor will both discover a breach in the client’s accounting system and report the breach’. Obviously, the first condition depends on the auditor’s technical or professional capabilities whereas the second depends on the auditor’s independence. In other words, an audit report is deemed of value if it results from both a technically competent and independent audit process (Citron and Taffler, 1992). The fact that an auditor might believe that a firm is going to fail and yet decides not to disclose this opinion implies that disclosure most likely depends upon: (i) the auditor’s prediction of failure; and (ii) the utility function of the auditor regarding the disclosure of the results of that prediction. For this reason, it is suggested in the analytical accounting literature that auditor decision-making probably involves economic trade-offs, such as the cost of losing a client, the expected cost of being exposed to third-party lawsuits, and the anticipated cost of loss of reputation (De Angelo, 1981a; Watts and Zimmerman, 1986; Louwers, 1998).

This study attempts to find empirical evidence of ex ante factors relating to the economic trade-offs that the auditor faces and that may influence his going concern opinion decision. In this way, potential situations can be identified in which the auditor’s independence may be compromised.

GOING CONCERN, LEGISLATION, ROLE OF THE AUDITOR

Belgian bookkeeping law states that valuation rules should be formulated from the viewpoint of the going concern principle (Article 16 KB, 8 October 1976). It also states that, from the moment that an entity is unable to continue as a going concern, valuation rules must be adapted, and the assets and liabilities assessed at their expected liquidation value. Since the valuation rules are laid down by the Board of Directors, it is their responsibility to determine whether or not the entity may be considered as a going concern. Besides Belgian bookkeeping law, Belgian company law also contains two articles relating to the going concern of an entity. The first article (103, Alarmprocedure) states: ‘If net assets are less than 50% of the subscribed capital, the Board of Directors is required to convene the members of the General Meeting, who must decide on the basis of the Board’s reorganisation plans whether or not to continue the entity. The diagnosis should take into account the specific characteristics of the entity at the closing date of the financial year, as well as events between this closing date and the date on which the Boards of Directors approves the annual statements and submits them to the General Meeting’. The second article (104) says that ‘if net assets are below the minimal amount stated in article 29, i.e. BEF 1,250,000, any interested party may appeal to the court to dissolve the company’. In addition, the Belgian Institute of Auditors issued the following non-binding circular letter (C.007:82, 19 November 1982), outlining recommended practice with regard to companies with a going concern problem:

‘1. If the auditor ascertains serious circumstances that may jeopardise the financial stability of the company, he should make sure that the direction of the company is aware of the gravity of the situation. If necessary, the auditor may prompt the bodies that bear legal and statutory responsibility to adopt a position;
2. The auditor should make sure that the company complies with articles 103 and/or 104 of company law if applicable;
3. The auditor should make sure that the General Meeting is correctly informed about the financial position of the company. If the annual report of the Board of Directors provides the required explanations, the auditor may refer to

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it without qualifying his report. Conversely, if it is not possible to make a clear judgement about the financial position on the basis of the annual report or if the auditor, despite the arguments of the Directors, is not quite certain that the company will be able to continue its operations until the end of the following financial year, a qualified opinion may be called for; 4. The auditor should issue a disclaimer of opinion if article 40 of the law on bookkeeping has not been complied with, i.e. when the company has stopped meeting its obligations as they become due or if it owes its survival to fictitious credit’.

Since the implementation of the revised Belgian Bankruptcy Act on 1 January 1998, an auditor who has substantial doubts about the continued existence of a company is required to report this to the Board of Directors. If the Board of Directors does not come up with an appropriate reorganization plan, the auditor must inform the Court of Commerce and disclose going concern uncertainty in the audit report.

**RESEARCH QUESTIONS AND HYPOTHESES**

**Anglo-Saxon Countries versus Continental European Countries**

Generally speaking, auditors in continental European countries are assumed to be more reluctant to express going concern uncertainty in audit reports than their counterparts in Anglo-Saxon countries. This assumption stems from the major differences that exist between the legal and institutional environments of continental Europe and the Anglo-Saxon world. More specifically, it is believed that differences in capital markets, relations between capital providers and firms, and dissimilarities between the legal systems may affect auditors’ going concern opinion decisions. High capital market financing rates characterize the Anglo-Saxon world, while in continental European countries companies tend to be financed by banks (Nobes and Parker, 1991). Moreover, it appears that banks keep a lots of companies artificially alive by not cutting off credit lines. Indeed, termination of credit on the part of banks is an unusual course of action that is generally only resorted to if the financial situation of the company is extremely bad (Martin, 1997). Shareholders, however, tend to be much more eager than banks to withdraw their money from a company in financial trouble. As a result, the risk of bankruptcy and consequently the probability that the auditor will be confronted with a client going out of business may be lower in continental Europe than in the Anglo-Saxon world. In addition, shareholders generally have less access than banks to internal company information. Consequently, there may be greater need in countries with high capital financing rates for certified financial statements and, in particular, for the disclosure of going concern uncertainty by an independent auditor (Nobes and Parker, 1991). Finally, litigation rates in continental Europe are much lower than in Anglo-Saxon countries (Kinney, 1994; Gietzmann and Quick, 1998). Countries where litigation is relatively uncommon tend to have government-prescribed accounting standards that are rather conservative, while banks or the government are the major providers of capital (Mueller et al., 1994). In this sense, Belgium is a typical continental European country: accounting is governed by laws and banks play a central role in corporate financing (Lefebvre and Flower, 1994).

Another element contributing to the expectation that continental European auditors will generally be more reluctant to disclose going concern uncertainty in their audit report is the fact that auditing guidelines on going concern assessment in most continental European countries are rather subjective, general and ambiguous. However, some countries in continental Europe have recently revised their audit standards after the example of the US, which in 1988 replaced SAS No. 34, on ‘the auditor’s considerations when a question arises on an entity’s continued existence’, with SAS No. 59. The main consequence of the change of standard is that the task of assessing a company’s ability to continue as a going concern has been transformed from a negative into an affirmative duty. According to SAS No. 34, an auditor should not, in the normal course of an audit, search for information about the continued existence of the entity under audit. The new SAS No. 59, by contrast, requires the auditor to evaluate in every audit whether there is substantial doubt about the entity’s ability to continue.
as a going concern for a reasonable period of time, i.e. 1 year. However, SAS No. 59 clearly does not make auditors responsible for predicting future events, nor does it require auditors to perform more procedures than they used to.

IFAC revised its International Standard on Auditing with respect to the going concern issue (ISA 23) for the third time in 1994. With respect to the responsibility of the auditor, ISA 23 states that: 'When planning and performing audit procedures and in evaluating the results thereof, the auditor should consider the appropriateness of the going concern assumption underlying the preparation of the financial statements'. This contrasts to the former version of the standard, which merely required the auditor to take into account during the audit the possibility that the going concern assumption, on the basis of which the annual statements are drawn up, may be questioned.

The audit professions in other countries, such as the UK and the Netherlands, have changed their standards too, so that they now more or less correspond with ISA 23. Germany is still lagging behind, since no change has been made until now with respect to the auditor’s responsibilities for reporting going concern uncertainties. France, by contrast, also significantly increased the auditor's responsibilities in terms of reporting going concern uncertainties. The French model served as an example for Belgium's revised Bankruptcy Act of 1 January 1998, which should likewise increase auditors' responsibilities in relation to going concern assessment (see Going Concern, Legislation, Role of the Auditor' section).

**Auditor Competence**

As argued above, auditor decision-making in the presence of going concern uncertainties may be characterized as a two-stage process. The auditor will first recognize that a company has a potential going concern problem. After recognizing the problem status of the company, he will decide whether or not a going concern modification is appropriate. At each stage of this decision-making process, the auditor will focus on certain cues or variables that will help him to make a judgement. With reference to the definition of audit quality, one can say that identifying a company with going concern problems is a question of competence, while deciding to disclose the going concern uncertainty is a question of independence. Auditor competence and independence are interdependent dimensions of the audit process and are difficult to separate out. Therefore, the research questions that are put forward here focus on the combined presence of competence and independence.

First, it would be interesting to determine how great the likelihood of failure must be for the auditor to conclude that disclosure of a going concern uncertainty is inevitable, irrespective of the question of auditor independence. In other words: 'What is the relationship between the likelihood of client failure and the type of audit report issued?' From the viewpoint of auditor competence, one may expect that the higher the likelihood of failure, the more straightforward the judgement as to whether a client is suffering going concern problems. In this respect, it might be possible to find a certain cut-off point. It is hence hypothesized that:

\[ H_1: \text{The higher the probability of failure on the part of a company on balance sheet date, the less likely it is to receive an unqualified audit report.} \]

In addition to the probability of failure, it may be interesting to consider another variable that is likely to be related to financially stressed enterprises. This variable is the time lag between the balance sheet date and the submission date of the annual accounts and audit report to the Belgian National Bank. Under Belgian Company Law, the directors of a company are required to present the annual accounts to the shareholders within 6 months from the balance sheet date. The annual accounts and the audit report must either be sent to the shareholders or they must be available for consultation within the company for at least 15 days before the Annual General Meeting. The annual accounts and the audit report have to be submitted to the Belgian National Bank within 30 days of the Annual General Meeting.

Anglo-Saxon authors (e.g. Ashton et al., 1987) attach a great deal of importance to the timeliness of accounting information in general and audit delay in particular. Caution is called for, however, because audit delay may be due to a difference in procedure and national legislation.
The Australian Stock Exchange, for example, suspends companies from trading on the grounds of non-compliance with timeliness requirements. In other words, there is an incentive for companies not to delay submission of their annual accounts. In Belgium, on the other hand, no special timeliness requirements are imposed for listed firms. Usually, there is no external pressure on the auditors to work as quickly as possible, nor is there an incentive for firms to submit their annual accounts at the earliest possible date. As a result, auditors are usually able to perform their work according to urgency, client pressure, personal preferences or anticipated difficulties. This may totally disrupt the importance that Anglo-Saxon authors attach to timeliness and audit delay and may cast a completely different view on the relevance of external reporting (De Ceuster and Trappers, 1993). Nevertheless, problem companies may still be expected to delay submission of their annual accounts to the Belgian National Bank. Therefore, the question arises: ‘What is the relationship between the submission delay for the annual accounts and the audit report on the one hand, and the type of audit report issued on the other?’ In our research, a distinction is made between ‘general meeting delay’ and ‘submission lag’. The term ‘general meeting delay’ refers to a delay in the presentation of the annual accounts and the audit report to the shareholders, while ‘submission lag’ refers to a delay in the submission of the annual accounts and the audit report to the Belgian National Bank. The related hypotheses are formulated as follows:

**H2.1:** The likelihood of an unqualified audit report decreases if the annual accounts and the audit report are not presented by the Board of Directors to the shareholders within 6 months of the balance sheet date.

**H2.2:** The likelihood of an unqualified audit report decreases if the annual accounts and the audit report are not submitted to the Belgian National Bank within 30 days of the annual general meeting.

**Economic Trade-offs**

As stated above, an audit report only has value if the auditor is capable of discovering a breach in the client’s accounting system and will subsequently report it. Therefore, given that the auditor is competent, the economic interest of the auditor in a client and the type of audit report issued in case of going concern uncertainty need to be explored. Indeed, the going concern opinion decision seems to involve economic trade-offs with, for example, the risk of losing a client, the risk of being exposed to third-party lawsuits, and the risk of loss of reputation (De Angelo, 1981a; Watts and Zimmerman, 1986; Louwers, 1998). By reviewing the literature, we succeeded in identifying the following *ex ante* factors that may relate to the economic trade-offs that the auditor is confronted with and that may, therefore, influence his going concern opinion decision: litigation, reputation, fear for the self-fulfilling prophecy and audit loss.

**Litigation**

Litigation will not be taken into account, since the threat of litigation is assumed to have only a marginal impact on the Belgian auditor’s independence, given the low litigation rates in continental European countries.

**Reputation**

Reputation appears to be a factor that may enhance auditors’ independence. De Angelo (1981b) asserts that financial statement users have difficulties assessing the quality of an audit. As a result, financial statement users will develop observable proxies that are associated with audit quality. Audit firm size and reputation are examples of such proxies. Empirical research has shown that audit firms involved in disciplinary action tend to loose market share relative to their competitors (Wilson and Grimlund, 1990). Since disciplinary action is very rare in the present Belgian business context, this criterion cannot be used to evaluate reputation. Therefore, reputation will be proxied by audit firm size. This leads to the following research question: ‘What is the relationship between the size of the audit firm and the type of audit report issued?’ The underlying assumption is that Big 6 audit firms will deliver better quality (e.g. De Angelo, 1981b; Palmrose, 1986; Davidson and Neu, 1993). On the one hand, this implies that Big 6 audit firms are more capable of discovering a breach in the client’s accounting system, and on the other, that they will
report the breach more easily. The latter could be due to their concern that if the discovery of an unreported breach is made public, their reputation will be affected. Therefore, it is hypothesized that:

**H3:** Companies that are audited by Big 6 audit firms experience a lower rate of unqualified audit reports than a matched group of companies audited by non-Big 6 audit firms.

**Self-fulfilling Prophecy**

According to the ‘self-fulfilling prophecy’ argument, a qualified audit report for going concern uncertainty may actually bring about client failure because of its impact on current as well as prospective investors, creditors, suppliers and customers. In other words, it is argued that ‘the auditor’s early warning could itself be the proximate cause of bankruptcy’ (Elliott and Jacobson, 1987). It appears from anecdotal evidence that Belgian auditors, too, seem to believe in the self-fulfilling prophecy. However, in the limited number of archival Anglo-Saxon studies, no evidence has been found to support this assumption (e.g. Citron and Taffler, 1992; Nogler, 1995). Clearly, it would be extremely interesting for the Belgian audit profession to have conclusive evidence of whether or not the theory of the self-fulfilling prophecy holds in practice. This consideration led to the following research question: ‘Is there evidence to support the self-fulfilling prophecy hypothesis?’ Given the strong fear among Belgian auditors for the self-fulfilling prophecy, it is hypothesized that:

**H4:** Companies for which going concern uncertainty is disclosed in the audit report in year \( t - 1 \) will exhibit a higher rate of bankruptcy in year \( t \) than a matched group of companies for which going concern uncertainty is not disclosed in the audit report in year \( t - 1 \).

**Audit Loss**

Audit loss may occur if a client goes bankrupt or switches auditors, among other things. In this respect, we believe the factor audit loss to be related to the above-mentioned factor, i.e. the fear of the self-fulfilling prophecy. The possibility that the client might dispose of one auditor and switch to another if disclosure is made of a breach on the part of management is yet another factor that compromises the auditor’s independence. The existing empirical Anglo-Saxon evidence on the connection between audit report qualifications and auditor switching, however, is contradictory (e.g. Chow and Rice, 1982; Menon and Schwartz, 1985; Craswell, 1988; Haskins and Williams, 1988; Krishnan, 1994; Lennox, 1998). In contrast to Anglo-Saxon countries, auditors in Belgium are hired for a period of 3 years. After this period, their mandate may be renewed, but in the meantime they can only be dismissed under very exceptional circumstances. This raises certain questions, including whether the threat of auditor switching is less significant in a Belgian context. Since the threat of client switching to the incumbent auditor cannot be observed, we tried to establish whether companies that do switch auditors are more likely to receive a clean audit. In other words, we were interested to find out whether there is any evidence to suggest that companies successfully use auditor switching in order to avoid receiving unclean audit reports (so-called ‘opinion-shopping’). This leads to the following research question: ‘What is the relationship between auditor switching and audit report qualifications?’ Given the contradictory results of previous research, no direction is posited for the ensuing hypothesis:

**H5.1:** Companies that changed auditors are not more likely to receive an unqualified audit report than a matched group of companies that did not change auditors.

A concept closely related to that of auditor switching is tenure. Tenure refers to the length in years of the auditor–client relationship. One might expect that the longer the relationship between the auditor and the client, the more likely that the auditor will issue an unqualified opinion. This expectation is based on the belief that long tenure can potentially affect auditor independence. Therefore, it is hypothesized that:

**H5.2:** Companies that have a longer relationship with their auditor are more likely to receive an
unqualified audit opinion than a matched group of companies that have a shorter relationship with their auditor.

Another important factor in relation to audit loss is the economic interest of the auditor in a client. The economic interest of the auditor in a client can be measured by looking at the auditor’s expected future revenues from the auditor–client relationship. Therefore, we are interested in the following research question: ‘What is the relationship between the expected future revenues from the auditor–client relationship and the type of audit report issued?’ One may expect that if the loss of audit fee is significant, auditors may be less likely to issue a going concern qualification. The related hypothesis is formulated as follows:

\[ H5.3: \text{Companies from which the auditor expects comparatively high future revenues are more likely to receive a clean audit report than a matched group of companies from which the auditor expects low future revenues.} \]

The economic interest of an audit firm in a client may also be influenced by recent loss of other audit clients. Indeed, if the audit firm has recently lost audit clients, it may be inclined to minimize the risk of losing more. In other words, the recent loss of audit clients may increase the economic interest of the audit firm in their remaining clients. We, therefore, formulate the following research question: ‘What is the relationship between the circumstance of recent client losses and the type of audit report subsequently issued to other clients?’ It is hypothesized that:

\[ H5.4: \text{Companies whose auditor has lost clients recently are more likely to receive an unqualified audit report than a matched group of companies whose auditor has not.} \]

**Report of the Board of Directors**

One of the characteristics of a Belgian audit report for a large company is that it must inevitably refer to the annual report of the Board of Directors. More specifically, the auditor must indicate whether the annual report contains all the statutory information and whether it is in accordance with the annual statements. As a rule, the annual report of the Board of Directors comments clearly on the company’s status as a going concern, as it must contain a statement concerning anticipated developments within the concern. The role of the auditor is still limited in this respect. All he can do is report whether all the information required by law has been disclosed. If certain information is lacking, the auditor must take note. He cannot, however, provide the missing data personally. Given the fact that an auditor in Belgium has to refer to the annual report of the Board of Directors, it may be interesting to consider the following research question: ‘What is the influence of the annual report of the Board of Directors on the audit report with respect to the going concern audit opinion decision?’ It would appear that two statutory paragraphs of the board’s annual report may be particularly relevant in this respect, i.e. paragraph 2 ‘important events after the closing of the fiscal year’ and paragraph 3 ‘circumstances which can influence significantly the development of the company’. Besides these two paragraphs, another potentially important element is the mentioning in the Annual Report of the Board of Directors that article 103 or 104 of Belgian Company Law (see ‘Going Concern, Legislation, Role of the Auditor’ section) are applicable. Furthermore, annual reports of the Board of Directors can provide additional information besides that required by law. A distinction may be made between three types of additional information: general information on the economic situation, description of the prospects for the company and description of actions and/or measures that will be taken.

The question arises whether the presence of some or all of these elements in the annual report of the Board of Directors has any influence on the reporting behaviour of the auditor. From the viewpoint of the auditor, one might expect it to be the case that if the board’s annual report contains ‘bad news’, either in the paragraphs prescribed by law or in the supplementary information, the auditor will be more inclined not to issue an unqualified audit report. If the Board of Directors recognizes the precarious state of affairs of the company and decides to disclose it in its annual report, there may no longer be a conflict of interests between itself and the auditor. On the other hand, one
could argue that if the annual report of the Board of Directors contains ‘bad news’, there is no reason for the auditor to reiterate this information in his audit report. The auditor’s duty with respect to the annual report of the Board of Directors is indeed restricted to reporting whether all the information required by law is included in it and whether it corresponds with the financial statements. However, we would expect the first argument to take precedence. Therefore, the following hypotheses are formulated:

\[ H_6: \text{The inclusion of the second paragraph of the annual report of the Board of Directors ‘Important events after the closing of the fiscal year’ increases the likelihood of an ‘unclean’ audit report.} \]

\[ H_7: \text{The inclusion of the third paragraph of the annual report of the Board of Directors ‘Circumstances which can influence significantly the development of the company’ increases the likelihood of an ‘unclean’ audit report.} \]

\[ H_8: \text{The inclusion of additional information in the annual report of the Board of Directors increases the likelihood of an ‘unclean’ audit report.} \]

\[ H_9: \text{The inclusion of article 103 or 104 in the annual report of the Board of Directors increases the likelihood of an ‘unclean’ audit report.} \]

With the revision of the Belgian Bankruptcy Act, implemented on 1 January 1998, the Belgian legislator introduced a new obligation for the Board of Directors: ‘If a company experiences negative retained earnings or a bottom line loss for the second year running, then the Board of Directors should motivate why it should continue to be allowed to formulate valuation rules from the perspective that activities will be continued’. It is the auditor’s duty to see to it that this new requirement is met.

**RESEARCH DESIGN AND METHODOLOGY**

**Sample Design**

The empirical analysis in this paper is conducted on the basis of three samples taken from the September 1996 and September 1997 versions of the CD-ROM containing the annual accounts that companies submitted to the Belgian National Bank.

The first sample was drawn from the entire population of large Flemish companies that went bankrupt in 1996. The second sample contains financially stressed non-bankrupt large Flemish companies. Hopwood *et al.* (1994) emphasize the importance of distinguishing between financially stressed and non-stressed firms when examining the auditor going concern opinion decision. On the basis of common criteria in the literature (Kida, 1980; Mutchler, 1985; Hopwood *et al.*, 1994), a company is considered to be financially stressed if it has either experienced a negative working capital in the current year or suffered an operational loss, a bottom line loss, or negative retained earnings in the current year or the previous 2 years. Since the working capital of companies is not disclosed on the CD-ROM, another indicator to trace problems of liquidity is used, namely the quick ratio. The criterion of a negative working capital is consequently replaced with a quick ratio smaller than 1. The third sample is a control sample and contains financially non-stressed non-bankrupt large companies. Menon and Schwartz (1985) emphasize the importance of matching control groups of companies by year, industry and size. Therefore, the three samples were matched by year (fiscal year 1995), industry (using NACE-BEL codification) and size (based on turnover). The audit report and the report of the Board of Directors were collected and examined for each company of the samples.

The dependent binary variable is ‘going concern uncertainty disclosure’ (coded 1 in case going concern uncertainty is disclosed in the audit report). In this respect, audit opinions were first categorized into the following two groups: unqualified opinions (‘clean’ audit reports) and other opinions (qualified, disclaimer or adverse opinion). Within the group of other than unqualified opinions a distinction was made between audit reports which disclose going concern uncertainty and audit reports which do not disclose going concern uncertainty. Table 1 illustrates the sample proportions and the type of audit reports issued.
Table 1. Sample proportions and the type of audit reports issued

<table>
<thead>
<tr>
<th>Fiscal year 1995</th>
<th>Sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankrupt firms</td>
<td>44 (43.6%)</td>
<td>209</td>
</tr>
<tr>
<td>Stressed firms</td>
<td>69* (68%)</td>
<td></td>
</tr>
<tr>
<td>Non-stressed firms</td>
<td>96 (95%)</td>
<td></td>
</tr>
</tbody>
</table>

*It should be noted that in six out of a total of 69 audit reports going concern problems were mentioned, although the auditor defined his report as being unqualified.

**Model Variables and Measurement**

Table 2 provides an overview of the dependent and explanatory variables and the way in which they are measured.

**Methodology**

Each of the suggested explanatory variables will first be tested in a univariate way to see whether there are significant differences between companies with an audit report in which going concern uncertainty is disclosed and companies with an audit report in which going concern uncertainty is not disclosed.

Since the explanatory variables do not follow a normal distribution, the univariate tests are performed using the non-parametric Mann–Whitney test.

To assess the incremental contribution of each variable in the auditor’s going concern opinion decision, the explanatory variables will subsequently be tested in a multivariate way.

Therefore, a logistic regression model will be developed, given the relative non-normality of financial ratios (Hopwood et al., 1991) and the special estimation problems related to binary dependent variables (Maddala, 1983). The specification of the logistic regression model looks as follows:

\[
\text{GCUD}_i = \beta_0 + \beta_1\text{FINC}_i + \beta_2\text{GMDELAY}_i + \beta_3\text{SUBMLAG}_i + \beta_4\text{SWITCH}_i + \beta_5\text{TENURE}_i + \beta_6\text{B6NB6}_i + \beta_7\text{LNFEE}_i + \beta_8\text{CLIENTLOSS}_i + \beta_9\text{PAR2}_i + \beta_{10}\text{PAR3}_i + \beta_{11}\text{ADINFO}_i + \beta_{12}\text{ART103104}_i + \varepsilon_i.
\]

**RESULTS AND ANALYSIS**

**International Differences in Going Concern Uncertainty Disclosures**

Of the 101 Flemish companies that went bankrupt in 1996, only 25.7% received an other than unqualified audit report because of going concern uncertainties. If one compares this percentage with that observed in similar studies in the US (e.g. Koh, 1991; Raghunandan and Rama, 1995; Carcello et al., 1997), it appears that the proportion of bankrupt companies with a going concern qualification in the US is much higher: it ranges from 39% to 54% (prior to SAS No. 59). This finding confirms the expectation that auditors in continental European countries are more reluctant to express going concern uncertainty in their audit report than those in the US. Similar studies in the UK (e.g. Peel, 1989; Citron and Taffler, 1992) show that the proportion of bankrupt companies with a going concern qualification in that country is much lower than in the US, approximating more closely to the result for Belgium. A possible explanation for this observation is the fact that the regulatory and legal environment in the US provides better safeguards for auditor independence.

**Univariate Analysis**

In order to arrive at some tentative observations concerning group differences, each of the suggested explanatory variables was first tested univariately. This was intended to reveal whether there are significant differences between companies with an audit report in which going concern uncertainty is disclosed and com-
Table 2. An overview of the dependent and explanatory variables and method of measurement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCUD&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Going concern uncertainty disclosure in the audit report of client &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;</td>
<td>Binary variable GCUD&lt;sub&gt;i&lt;/sub&gt; = 1 in case going concern uncertainty is disclosed in the audit report, else GCUD&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td><strong>Independent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINCi</td>
<td>Financial condition of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;</td>
<td>General discriminant score (D-score) of a popular bankruptcy model developed for Belgian companies&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>GMDELAY&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Submission delay of the annual accounts and audit report of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; to the shareholders</td>
<td>Binary variable The time in months between the balance sheet date and the date of the annual general meeting: GMDELAY&lt;sub&gt;i&lt;/sub&gt; = 1 if time in months = 6; else GMDELAY&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>SUBMLAG&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Submission lag of the annual accounts and audit report of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; to the Belgian National Bank</td>
<td>Binary variable The time in days between the date of the annual general meeting and the submission date of the annual accounts and audit report to the Belgian National Bank: SUBMLAG&lt;sub&gt;i&lt;/sub&gt; = 1 if time in days = 30; else SUBMLAG&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>SWITCH&lt;sub&gt;ij&lt;/sub&gt;</td>
<td>Company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; switched to auditor &lt;i&gt;&lt;sub&gt;j&lt;/sub&gt;&lt;/i&gt; in the previous period (t - 1, t - 2, or t - 3)</td>
<td>Binary variable SWITCH&lt;sub&gt;ij&lt;/sub&gt; = 1 in case a switch occurred, else SWITCH&lt;sub&gt;ij&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>TENURE&lt;sub&gt;ij&lt;/sub&gt;</td>
<td>Length of the auditor–client relationship</td>
<td>The number of years that auditing firm &lt;i&gt;&lt;sub&gt;j&lt;/sub&gt;&lt;/i&gt; has been engaged by client &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;</td>
</tr>
<tr>
<td>B6NB&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; has a Big 6 auditor or a non-Big 6 auditor</td>
<td>Binary variable B6NB&lt;sub&gt;i&lt;/sub&gt; = 1 in case of a Big 6 auditor, else B6NB&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>LNFEEx</td>
<td>The natural logarithm of the firm audit fees for client &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;</td>
<td>Audit fees are proxied&lt;sup&gt;b&lt;/sup&gt; by: total assets = operational revenues = financial revenues</td>
</tr>
<tr>
<td>CLIENTLOSS&lt;sub&gt;j&lt;/sub&gt;</td>
<td>Clients lost by audit firm &lt;i&gt;&lt;sub&gt;j&lt;/sub&gt;&lt;/i&gt; during the previous year</td>
<td>Number of clients (scaled by the annual number of firm clients) lost during the previous year (loss = −; gain = +)</td>
</tr>
<tr>
<td>PAR2&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Information in paragraph 2 of the annual report of the Board of Directors of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; 'important events after the closing of the fiscal year'</td>
<td>Binary variable PAR2&lt;sub&gt;i&lt;/sub&gt; = 1 in case important negative events after the closing of the fiscal year have occurred and are mentioned in the annual report of the Board of Directors, else PAR2&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>PAR3&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Information in paragraph 3 of the annual report of the Board of Directors of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt; 'circumstances which can influence significantly the development of the company'</td>
<td>Binary variable PAR3&lt;sub&gt;i&lt;/sub&gt; = 1 in case the annual report of the Board of Directors describes circumstances which can influence significantly the development of the company in a negative way, else PAR3&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
<tr>
<td>ADINFO&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Additional information given in the annual report of the Board of Directors of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;: general information on the economic situation, description of the prospects for the company, description of actions, measures that will be taken</td>
<td>Ordinal variable ADINFO&lt;sub&gt;i&lt;/sub&gt; = 0 in case no additional information is given; ADINFO&lt;sub&gt;i&lt;/sub&gt; = 1, 2 or 3 in case information is given on one, two or three elements, respectively</td>
</tr>
<tr>
<td>ART103104&lt;sub&gt;i&lt;/sub&gt;</td>
<td>Application of article 103 or 104 of the Belgian Company Law is mentioned in the annual report of the Board of Directors of company &lt;i&gt;&lt;sub&gt;i&lt;/sub&gt;&lt;/i&gt;</td>
<td>Binary variable ART103104&lt;sub&gt;i&lt;/sub&gt; = 1 in case the application of the article(s) is mentioned, else ART103104&lt;sub&gt;i&lt;/sub&gt; = 0</td>
</tr>
</tbody>
</table>

<sup>a</sup> The D-score is calculated from the general multiple linear discriminant model (developed for Belgian companies by Ooghe and Verbaere, 1982) consisting of the following ratios: accumulated profit (loss) & reserves/total liabilities; taxes and social security charges/short-term external liabilities; cash/restricted current assets; work in progress & finished goods/restricted current assets; short-term financial debts/short-term external liabilities. The D-score of the general bankruptcy prediction model has a prediction accuracy of 75.6% when using the optimal cut-off point of D-score = 0.1304 (Ooghe et al., 1995).

<sup>b</sup> In Belgium, scales for audit fees, developed by the Belgian Institute for Auditors, are based on the average number of audit working hours, which is considered to depend on the sum of total assets, operational and financial revenues. It should be noted though that these scales are only indicative and might not correspond to the actual fees in practice.
companies with an audit report in which going concern uncertainty is not disclosed. The results of the Kolmogrov–Smirnov test showed very clearly that the explanatory variables do not follow a normal distribution. Therefore, the non-parametric Mann–Whitney test was used to compare the means of the two independent groups. Table 3 presents the results of the univariate analysis. The table highlights some basic differences between the companies that received an audit report with a going concern uncertainty disclosure and companies that did not. It appears that certainly the financial situation of the firm, and also a delay in the annual General Meeting, are significant factors in determining the likelihood that an auditor will disclose going concern uncertainties in the audit report. Furthermore, it appears that companies with a going concern uncertainty disclosure tend to submit their annual accounts and the audit report to the Belgian National Bank less swiftly than other companies. However, this difference is not significant. Table 3 further suggests that the auditor’s propensity to disclose going concern uncertainties is moderated by other significant external factors. In particular, the length of the auditor–client relationship and the number of clients lost appear to significantly decrease the auditor’s likelihood to disclose going concern uncertainties. Companies that switched auditors appear to be more likely to receive a going concern uncertainty disclosure than companies that did not. This result is related to the finding that high tenure decreases the likelihood of a going concern uncertainty disclosure. A more detailed analysis on the tenure-variable showed that auditors in their first mandate (first 3 years) with a client are more willing to disclose going concern uncertainty than auditors whose mandate has been renewed ($x^2 = 0.05$). In other words, auditors whose relationship with the client exceeds 3 years are less willing to disclose going concern uncertainties. However, no significant difference was found in reporting behaviour between the first 2 years of the auditor mandate and the last year of the auditor mandate after which the client has to decide on whether to continue the relationship with the auditor. No significant differences were found between the GCUD sample and the NGCUD sample for the variables ‘client’s audit fees’ and ‘type of auditor’. Finally, Table 3 indicates that the report of the Board of Directors appears to influence the auditor’s going concern opinion decision. More specifically, the presence of supplementary information or article 103/104 of Company Law in the annual report of the Board of Directors significantly increases the likelihood that the auditor will disclose going concern uncertainty.

### Logistic Regression Results

While the univariate analysis provides some useful insights, logistic regression results facilitate the assessment of the incremental contribution of each variable in the auditor’s going concern uncertainty disclosure decision.
Table 4. Logistic regression results for the entire sample. Dependent variable: GCUD (disclosure of going concern problems = 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter estimate</th>
<th>S.E.</th>
<th>Wald chi-square</th>
<th>Significance p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>0.4149</td>
<td>2.2945</td>
<td>0.0327</td>
<td>0.8565</td>
</tr>
<tr>
<td>FINC</td>
<td>-0.0097</td>
<td>0.0285</td>
<td>0.1165</td>
<td>0.7329</td>
</tr>
<tr>
<td>GMDELAY</td>
<td>-0.0047</td>
<td>0.0072</td>
<td>0.4172</td>
<td>0.5183</td>
</tr>
<tr>
<td>SUBMLAG</td>
<td>0.0099</td>
<td>0.0041</td>
<td>5.7788</td>
<td>0.0162**</td>
</tr>
<tr>
<td>SWITCH</td>
<td>1.1735</td>
<td>0.5762</td>
<td>4.1473</td>
<td>0.0417**</td>
</tr>
<tr>
<td>TENURE</td>
<td>0.0302</td>
<td>0.0979</td>
<td>0.0951</td>
<td>0.7578</td>
</tr>
<tr>
<td>6NB6</td>
<td>-0.2363</td>
<td>0.5161</td>
<td>0.2097</td>
<td>0.6470</td>
</tr>
<tr>
<td>LNFEED</td>
<td>-0.2606</td>
<td>0.1631</td>
<td>2.5522</td>
<td>0.1101</td>
</tr>
<tr>
<td>CLIENTLOSS</td>
<td>0.0160</td>
<td>0.0083</td>
<td>3.6645</td>
<td>0.0596*</td>
</tr>
<tr>
<td>PAR2</td>
<td>0.0298</td>
<td>0.3047</td>
<td>0.0096</td>
<td>0.9221</td>
</tr>
<tr>
<td>PAR3</td>
<td>-0.2010</td>
<td>0.3342</td>
<td>0.3617</td>
<td>0.5476</td>
</tr>
<tr>
<td>ADINFO</td>
<td>0.5971</td>
<td>0.1955</td>
<td>9.3248</td>
<td>0.0023***</td>
</tr>
<tr>
<td>ART103:104</td>
<td>1.8772</td>
<td>0.4237</td>
<td>19.6258</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

*** p = 1%; ** p = 5%; * p = 10%.

-2 Log likelihood: 182.919; Model chi-square: 51.017; Goodness of fit: 268.638; df: 12; Cox & Snell—$R^2$: 0.177; Significance: 0.0000; Nagelkerke—$R^2$: 0.300; Prediction accuracy: 86.26%.

Concern opinion decision. The logistic regression results are presented in Table 4. The model’s Chi-square is highly significant, indicating that the observations are well fit by the model. This is also illustrated by the high association of predicted probabilities with observed responses (86.17% correct).

In contrast to the results of the univariate analysis, the financial situation of the client rather surprisingly does not incrementally explain the auditor’s going concern opinion decision. Neither does the variable delay in the annual General Meeting. However, a delay in the submission of the annual accounts and the audit report significantly increases the probability of a going concern uncertainty disclosure. The factor that appears to significantly moderate the auditor’s going concern opinion decision is the loss of audit clients in the previous year. Consistent with the univariate analysis it is found that companies that switched auditors appear to be more likely to receive a going concern uncertainty disclosure than companies that did not. This could be an indication that the length of the auditor–client relationship does matter in some respect. However, the tenure variable is not significant. Table 4 further provides evidence that the annual report of the Board of Directors has a very strong impact on the auditor’s going concern opinion decision. Consistent with the univariate analysis, it is found that the inclusion of additional information and the inclusion of article 103/104 are highly significant incremental explanatory variables in the auditor’s going concern opinion decision.

In order to check whether the results might be biased due to the inclusion of financially stressed as well as non-stressed firms, the same logistic regression was run for the subsample of bankrupt companies and financially stressed non-bankrupt companies. The results are presented in Table 5. If one compares Tables 4 and 5, one notes that the findings are similar, except for the variable client’s audit fees, which appears in the subsample analysis to be a significant moderating factor in the auditor going concern opinion decision.

Supplemental Analysis

In order to examine whether there is any evidence of a self-fulfilling prophecy effect, a supplemental analysis was carried out. More specifically, a logistic regression model was developed with the state of the firm (bankrupt = 1, financially stressed non-bankrupt = 0) as the dependent variable. The explanatory variables contain the three suggested variables relating to the likelihood of failure (FINC, GMDELAY, SUBMLAG), as well as the GCUD variable, which is of main interest in this analysis. The variables which relate to the annual report of the Board of Directors (PAR2, PAR3, ADINFO, ART103/104) are also included with a view to
Table 5. Logistic regression results for the subsample bankrupt companies and financially stressed non-bankrupt companies. Dependent variable: GCUD (disclosure of going concern problems = 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter estimate</th>
<th>S.E.</th>
<th>Wald chi-square</th>
<th>Significance p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>1.4837</td>
<td>2.3835</td>
<td>0.3875</td>
<td>0.5336</td>
</tr>
<tr>
<td>FINC</td>
<td>0.0063</td>
<td>0.0328</td>
<td>0.0364</td>
<td>0.8486</td>
</tr>
<tr>
<td>GMDELAY</td>
<td>-0.0021</td>
<td>0.0078</td>
<td>0.0728</td>
<td>0.7873</td>
</tr>
<tr>
<td>SUBMLAG</td>
<td>0.0102</td>
<td>0.0043</td>
<td>5.5120</td>
<td>0.0189**</td>
</tr>
<tr>
<td>SWITCH</td>
<td>1.2204</td>
<td>0.6051</td>
<td>4.0680</td>
<td>0.0437**</td>
</tr>
<tr>
<td>TENURE</td>
<td>0.0684</td>
<td>0.1037</td>
<td>0.4346</td>
<td>0.5097</td>
</tr>
<tr>
<td>B6NB6</td>
<td>-0.1238</td>
<td>0.5545</td>
<td>0.0499</td>
<td>0.8233</td>
</tr>
<tr>
<td>LNFEFE</td>
<td>-0.3347</td>
<td>0.1791</td>
<td>3.4915</td>
<td>0.0617*</td>
</tr>
<tr>
<td>CLIENTLOSS</td>
<td>0.0212</td>
<td>0.0095</td>
<td>4.9447</td>
<td>0.0262**</td>
</tr>
<tr>
<td>PAR2</td>
<td>0.1037</td>
<td>0.3093</td>
<td>0.1124</td>
<td>0.7374</td>
</tr>
<tr>
<td>PAR3</td>
<td>-0.3394</td>
<td>0.3499</td>
<td>0.9407</td>
<td>0.3321</td>
</tr>
<tr>
<td>ADINFO</td>
<td>0.4211</td>
<td>0.1946</td>
<td>4.6815</td>
<td>0.0305**</td>
</tr>
<tr>
<td>ART103104</td>
<td>1.3095</td>
<td>0.4258</td>
<td>9.4572</td>
<td>0.0021***</td>
</tr>
</tbody>
</table>

*** p = 1%; ** p = 5%; * p = 10%.

2 Log likelihood: 161.502; Model chi-square: 33.085; Goodness of fit: 173.275; df: 12; Cox & Snell—$R^2$: 0.173; Significance: 0.0009; Nagelkerke—$R^2$: 0.257; Prediction accuracy: 81.61%.

66% of the sample consisting of financially stressed non-bankrupt firms would fail.

CONCLUSIONS

A comparison of the proportion of bankrupt companies with a going concern uncertainty disclosure in the audit report in the US, the UK and Belgium shows that the proportion in the US is much higher than that in either Belgium or the UK. A possible explanation for this observation is the fact that the regulatory and legal environment in the US provides better safeguards for auditor independence. However, further research in various countries is needed in order to assess the impact of increasing the auditors’ responsibilities for reporting going concern uncertainties on their reporting behaviour.

An auditor’s decision-making in the presence of going concern uncertainties can be characterized as a two-stage process. First, the auditor should identify a company with going concern problems, which is a matter of competence, and subsequently he will have to decide whether or not to report this finding, which is a matter of independence. Since auditor competence and independence are interdependent dimensions of the audit process and are difficult to separate out, the research questions that were put forward focus on the joint presence of competence...
Table 6. Logistic regression results for the subsample bankrupt companies and financially stressed non-bankrupt companies. Dependent variable: \( \text{STATE} \) (bankrupt = 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter estimate</th>
<th>S.E.</th>
<th>Wald chi-square</th>
<th>Significance p</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>-5.7847</td>
<td>1.2910</td>
<td>20.0785</td>
<td>0.0000***</td>
<td>***</td>
</tr>
<tr>
<td>FINC</td>
<td>0.0059</td>
<td>0.0292</td>
<td>0.0405</td>
<td>0.8406</td>
<td></td>
</tr>
<tr>
<td>GMDELAY</td>
<td>0.0254</td>
<td>0.0076</td>
<td>11.3320</td>
<td>0.0008**</td>
<td>**</td>
</tr>
<tr>
<td>SUBMLAG</td>
<td>0.0401</td>
<td>0.0098</td>
<td>16.8008</td>
<td>0.0000***</td>
<td>***</td>
</tr>
<tr>
<td>GCUD</td>
<td>-0.5084</td>
<td>0.4387</td>
<td>1.3427</td>
<td>0.2466</td>
<td></td>
</tr>
<tr>
<td>PAR2</td>
<td>0.4436</td>
<td>0.2743</td>
<td>2.6145</td>
<td>0.1059</td>
<td></td>
</tr>
<tr>
<td>PAR3</td>
<td>-0.2659</td>
<td>0.2993</td>
<td>0.7891</td>
<td>0.3744</td>
<td></td>
</tr>
<tr>
<td>ADINFO</td>
<td>0.5526</td>
<td>0.1800</td>
<td>9.4204</td>
<td>0.0021***</td>
<td>***</td>
</tr>
<tr>
<td>ART103104</td>
<td>-0.2095</td>
<td>0.3966</td>
<td>0.2791</td>
<td>0.5973</td>
<td></td>
</tr>
</tbody>
</table>

**p = 1%; ** p = 5%; * p = 10%.

- 2 Log likelihood: 194.000; Model chi-square: 52.198; Goodness of fit: 184.400; df: 8; Cox & Snell—\( R^2 \): 0.254; Significance: 0.000; Nagelkerke—\( R^2 \): 0.339; Prediction accuracy: 73.60%.

and independence. From the viewpoint of auditor competence, it was expected that the higher the likelihood of failure the higher the probability that the auditor would report going concern problems. However, the logistic regression results did not provide evidence that the probability of failure measured by the discriminant score of the general prediction model incrementally increases the likelihood of going concern uncertainty disclosure. This finding implies that the results of a bankruptcy prediction model are either not used by the auditor or that they do not influence the auditor’s going concern opinion decision. In addition to the financial condition of the firm, two other variables were analysed that are related to the likelihood of failure: a delay of the general meeting and a delay in the submission of the annual accounts to the National Bank. The logistic regression results provided evidence that companies with a going concern uncertainty disclosure in their audit report tend to delay the submission of their annual accounts to the National Bank.

From the viewpoint of auditor independence this study aimed at finding empirical evidence of \textit{ex ante} factors relating to the economic trade-offs that the auditor faces and that may influence his going concern opinion decision. The factor that appears to significantly moderate the auditor’s going concern opinion decision is the loss of audit clients in the previous year. It was also found that companies that switched auditors are more likely to receive a going concern uncertainty disclosure than companies that did not. This finding is consistent with the result of the univariate analysis that indicated that auditors in their first mandate (3 years in Belgium) from a client are more willing to disclose going concern uncertainty than auditors whose mandate has been renewed. However, no significant difference was found in reporting behaviour between the first 2 years of the auditor mandate and the last year of the auditor mandate, after which the client has to decide whether to renew the relationship with the auditor. Further research needs to be focused on the impact of auditor switching on auditor reporting behaviour, given the conflicting findings reported in the existent literature. The logistic regression results of the subsample analysis further provided evidence that the higher the expected future revenues from a client, the lower the propensity of the auditor to disclose going concern uncertainty.

It further appeared that the legal obligation for auditors of Belgian companies to refer to the annual report of the Board of Directors in their audit report has a significant impact on the auditor’s reporting behaviour. In particular, it was found that the presence of additional information and the presence of article 103/104 of Company Law in the annual report of the Board of Directors are highly significant incremental explanatory variables in the auditor’s going concern opinion decision. This finding confirms the expectation that any mention of ‘bad news’ on the part of the Board of Directors will decrease the conflict of interests between itself and the auditor. Consequently, the auditor’s judgement will be more straightforward, resulting in

a higher probability of going concern uncertainty disclosure.

Finally, it appears that the disclosure of ‘bad news’ in the annual report of the Board of Directors significantly increases the likelihood of bankruptcy. However, no indications were found of any so-called self-fulfilling prophecy effect. The disclosure of going concern uncertainty in a the audit report does not significantly increase the likelihood that the company in question will go bankrupt. We concede that the period studied between going concern uncertainty disclosure in the audit report and bankruptcy was only 1 year, which is rather short. Therefore, it would be interesting if further research could assess the potential negative effects of a going concern uncertainty disclosure over a longer period of time. In addition, more research is needed to deal adequately with the issue of a self-fulfilling prophecy effect, due to the difficulties involved in disentangling the impact of the going concern uncertainty disclosure from other indicators of financial distress.

Consequently, it is valuable to extend this type of research over a longer period of time to see whether the results are time-robust.

ACKNOWLEDGEMENTS

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NOTES


2. Belgian auditors defend their reluctance to disclose going concern uncertainties in audit reports by arguing that they are concerned about the ‘self-fulfilling prophecy’ effect. In the words of Paul Behets, the chairman of the Belgian Institute of Auditors, ‘every warning could mean the end of the company and damage all interested parties. When the management of the company with going concern problems does not seem to undertake any actions to restore their financial position, the auditor’s going concern opinion decision becomes even more sensitive’ (De Financieel Economische Tijd, August 1996).

3. A company is defined as being large if the number of employees exceeds 100 or if more than one of the following thresholds are exceeded: number of employees = 50; sales (excl. VAT) = BEF 200 million; total assets = BEF 100 million.

4. It is acknowledged that a submission delay is an ex post observation. However, one may assume that the auditor is able to assess ex ante when a company is likely to delay the publication of its annual accounts. This will be the case when it becomes obvious during the audit that the management of the company is reluctant to communicate its precarious financial situation to the public in general.

REFERENCES


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