

Trinity University

Digital Commons @ Trinity

School of Business Faculty Research

School of Business

9-1998

Evidence on Risk Changes Around Audit Qualification and Qualification Withdrawal Announcements

Neil L. Fargher

Michael S. Wilkins

Trinity University, mike.wilkins@trinity.edu

Follow this and additional works at: https://digitalcommons.trinity.edu/busadmin_faculty



Part of the [Business Commons](#)

Repository Citation

Fargher, N. L., & Wilkins, M. S. (1998). Evidence on risk changes around audit qualification and qualification withdrawal announcements. *Journal of Business Finance & Accounting*, 25(7-8), 829-847. <https://doi.org/10.1111/1468-5957.00215>

This Article is brought to you for free and open access by the School of Business at Digital Commons @ Trinity. It has been accepted for inclusion in School of Business Faculty Research by an authorized administrator of Digital Commons @ Trinity. For more information, please contact jcostanz@trinity.edu.

EVIDENCE ON RISK CHANGES AROUND AUDIT QUALIFICATION AND QUALIFICATION WITHDRAWAL ANNOUNCEMENTS

NEIL L. FARGHER AND MICHAEL S. WILKINS*

INTRODUCTION

The Auditing Standards Board eliminated the 'subject-to' qualification with *SAS No. 58* (AICPA, 1988a). Elimination of the 'subject-to' report implied that the Auditing Standards Board believed the opinion conveyed no material information to users or at least had no significant economic value. At the time the opinion was repealed a press report indicated that:

Many analysts lament that a major warning signal has been obscured. The auditors have lowered the red flag and want us to believe that it is still aloft.¹ (*Wall Street Journal*, May 17, 1989).

Although several studies have examined the information content of these opinions, the analysts' views in particular suggest that additional investigation is warranted.

An auditor's opinion on financial statements is an important responsibility of the accounting profession. In forming an opinion, the auditor must locate and assess the existence of material uncertainties which the auditor believes must be drawn to the attention of financial statement users. Kinney and Smith (1992) state that:

modified audit reports may show due diligence by the auditor, and may be the basis for the auditor's claim that the user was properly warned about a departure from GAAP or an unusual risk.

If modifications and qualifications to financial statements accurately identify material uncertainties that affect firm risk, then we would expect to observe shifts in risk when qualifications are disclosed. The purpose of this paper is to determine whether such shifts occur.²

Our tests are structured to determine whether partitioning based upon the public announcement of a qualified audit opinion is a sufficient basis for iden-

* The authors are respectively from Lundquist College of Business, University of Oregon, and Lowry Mays College and Graduate School of Business, Texas A&M University. They gratefully acknowledge the helpful comments from workshop participants at the University of Oregon and from an anonymous referee. Earlier versions of this paper also benefitted from the comments of Dan Dhaliwal, Mark Trombley, and seminar participants at the University of Arizona. (Paper received July 1997, revised and accepted January 1998)

Address for correspondence: Michael S. Wilkins, Lowry Mays College and Graduate School of Business, Texas A&M University, College Station, TX 77843-4353, USA.
e-mail: mswilks@tamvm1.tamu.edu

tifying shifts in risk.³ Most previous studies (e.g., Dodd, et al., 1984; Dopuch, et al., 1986; and Fields and Wilkins, 1991) use price revisions to proxy for the information inferred by the market at the time of the announcement. Price revisions, however, can be a function of revisions both in expected future cash flows and in the expected risk of future cash flows. Given that the nature of an audit qualification relates to the underlying risk of the firm, we believe that tests involving changes in risk provide a valuable alternative measure of the information that is conveyed by audit reports.

Our initial empirical tests do not detect a significant increase in systematic risk around announcements of qualified audit opinions. These tests, however, may be biased against finding such shifts given that public announcements are often pre-empted by other forms of disclosure. When we focus on announcements that are more timely – specifically, announcements of qualification withdrawals (which typically precede financial statement disclosure) – we find the change in systematic risk to be significant.⁴ We also document that firms with continuing material uncertainties have significantly higher levels of systematic risk than do firms announcing initial uncertainties. Our final series of tests include an analysis of changes in unsystematic risk. The results of these tests illustrate that unsystematic risk changes significantly, and in the prediction direction, when audit qualifications and withdrawals are announced. In summary, this paper provides evidence that qualified opinions are associated with significant changes in firm risk.

The remainder of the study is organized as follows. The next section provides background information on the nature of the qualifications used in this study. The third section provides our hypothesis development and the fourth section presents the sample selection procedure and summary data. The final two sections describe our results and provide concluding remarks.

BACKGROUND

Statement on Auditing Standards No. 58 (AICPA, 1988a) effectively eliminated the ‘subject-to’ audit opinion which auditors used to highlight financial statement uncertainties.⁵ The ‘subject-to’ qualifications have been replaced by explanatory paragraphs which do not appear to be announced to the public (as distinct from included in the audit report). Going concern modifications can still be made under *SAS No. 59* (AICPA, 1988b); however, between 1993 and 1996 a search of the *Wall Street Journal Index* identified only six public announcements of such modifications. We therefore focus our study on the announcement of the earlier ‘subject-to’ qualifications.

The use of ‘subject-to’ opinions does facilitate comparison to previous research. Early qualification-based research focused on detecting price revisions on the day the market learned of the qualifications. Results of this line of research are mixed. Ball, Walker and Whittred (1979), and Dodd, Dopuch,

Holthausen and Leftwich (1984) fail to support a price reaction to a qualification issuance. Elliott (1982) finds a price reaction prior to the announcement but not at the time of the announcement. Dopuch, Holthausen and Leftwich (1986) find a negative average price reaction to announcements of audit qualifications. These conflicting results are due in part to different definitions of information release dates and different treatment of potentially confounding news events.

More recently, Fields and Wilkins (1991) find a positive average price reaction to announcements of qualification withdrawals. Choi and Jeter (1992) show that qualified opinions are associated with decreasing earnings response coefficients. Chen and Church (1996) find that firms receiving a going concern opinion experience less negative returns around bankruptcy filings. Our paper extends this line of research by testing whether audit reports provide information that is relevant to the assessment of firm risk. Because our focus (i.e., the information content of the audit report) is comparable to that of previous researchers, this study is also subject to similar limitations. For example, because qualifications tend to follow a series of unfavorable economic events (Elliott, 1982), we cannot unambiguously separate information regarding the underlying uncertainties from the information content of the qualification *per se*. Further, to the extent that qualifications lag more timely announcements of underlying uncertainties, our tests will be biased against identifying shifts in risk.⁶ Our results must be interpreted with respect to these limitations.

DEVELOPMENT OF HYPOTHESIS

'Subject-to' qualifications result from uncertainties regarding issues such as litigation, asset realization, utility rate decisions, financing difficulties, and going concern assumptions. To the extent that these underlying uncertainties increase the variance of a firm's return relative to the market return, the firm's systematic risk will increase. Should the uncertainties leading to the qualification affect only unsystematic risk, then no change in systematic risk would be expected.

The link between material uncertainties and systematic risk (i.e., beta) can also be made by considering the theoretical components of systematic risk. Hamada (1972) partitions the systematic risk of equity into operating risk and risk arising from financial leverage. Regarding qualified opinions, uncertainties regarding asset realization and litigation, for example, can be viewed as affecting the operating risk of the firm. Another component of systematic risk, a component that is relevant in the context of qualified audit opinions, is default risk. Campbell and Mutchler (1988) suggest that the issuance of a going concern opinion may increase the firm's probability of financial failure. In other words, relatively severe opinions may increase the likelihood that firms will default on their debt obligations. Consistent with this prediction,

Chen and Church (1996) find that going concern opinions reduce the surprise associated with bankruptcy. To the extent that default risk cannot be diversified away, changes in default risk surrounding qualification announcements will also be positively related to changes in systematic risk.

Based on the expected changes in operating risk and/or default risk commensurate with the existence of 'material uncertainties', systematic risk should increase following qualification announcements. More formally, our hypothesis is as follows:

H₁: Equity betas increase subsequent to announcements of qualified opinions.

We operationalize our hypothesis with the market model, an empirical analog of the Capital Asset Pricing Model:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it} \quad (1)$$

where R_{it} is the return for firm i on day t , and R_{mt} is the market return on day t .⁷ To test for shifts in risk around qualification announcements, we estimate the following modified market model regression from day -200 to day $+200$ relative to the first public announcement of the qualified opinion:

$$R_{it} = \alpha_{1i} + \alpha_{2i} D_i + \beta_{1i} R_{mt} + \beta_{2i} (R_{mt}^* D_i) + \epsilon_{it}. \quad (2)$$

To allow the coefficients to vary across firms, the model is estimated separately for each sample firm and the average parameter estimates are used in our empirical tests. In equation (2), D is equal to zero for all trading days up to and including the day of the qualification announcement and is equal to one for all trading days after the qualification announcement. Under this specification, β_2 tests for a shift in systematic risk and α_2 controls for changes in the intercept.⁸ If a qualified opinion is positively associated with a firm's systematic risk level, then β_2 should be positive.

SAMPLE SELECTION AND SUMMARY MEASURES

Sample Selection Procedure

To obtain our sample of publicly announced qualified opinions, we searched the *Wall Street Journal Index* from 1972 through 1992. We omitted announcements occurring on the same day as the firm's earnings announcement. The remaining announcements do not include restructuring, dividend changes, or other contaminating events, but they do discuss the reason for the qualification. To be included in the final sample, firms were required to be listed on the CRSP NYSE/AMEX or NASDAQ tapes, to be shown on Standard and Poor's COMPUSTAT tapes, and to have non-missing audit opinion codes

(COMPUSTAT item #149). The latter restriction is necessary to determine whether the firm's first publicly announced qualified opinion occurred in the same year that it first received a qualification (to be discussed later).

Application of these criteria resulted in a sample of 110 qualification announcements. The 'subject-to' opinion announcements in this study include five categories: litigation, asset realization, financing issues, utility rate cases, and going concern assumptions. Our sample of public announcements has a lower proportion of asset realization uncertainties (18%) and a higher proportion of going concern qualifications (13%) than previous research (e.g. Elliott 1982; and Dodd et al., 1984). The proportion of litigation announcements (38%) is similar to that found in prior studies. Analysis based upon the type of qualification is not conducted due to the relatively small number of observations in each category. To the extent that some types of qualifications are not viewed by investors as reflecting an uncertainty that impacts firm risk, aggregation across all types of opinions may decrease the likelihood that we detect significant changes in equity beta.⁹

Summary Measures

Figure 1 provides a summary of the changes in net income, leverage and market value of equity for firms announcing qualified opinions. As might be expected, median net income declines in the year prior to qualification and in the year of qualification, but increases in post-qualification years. Median financial leverage levels increase during the qualification period then decrease in the post-qualification period. This trend, however, appears to be due primarily to changes in equity value rather than changes in outstanding debt, because debt-to-asset levels (not pictured) remain relatively constant across the five-year period. Median equity betas based on fiscal year calculations do not appear to exhibit the general trend predicted by Hypothesis 1. Specifically, based on a Wilcoxon test, median systematic risk calculated over the two hundred days prior to the qualification announcement is not significantly different from the median systematic risk following the qualification announcement. More powerful tests are presented in the following section.

RESULTS

Initial Tests

Table 1 presents the results of our initial tests. To conduct these tests, we first estimated equation (2) for each firm and then examined the cross-sectional distribution of firm coefficients. To reduce the impact of influential outliers we excluded observations where the parameter estimate was more than four standard deviations from the mean parameter estimate across all firms. This

Figure 1

Changes in Median Values for Selected Summary Measures Surrounding
Public Announcements of Qualified Audit Opinions

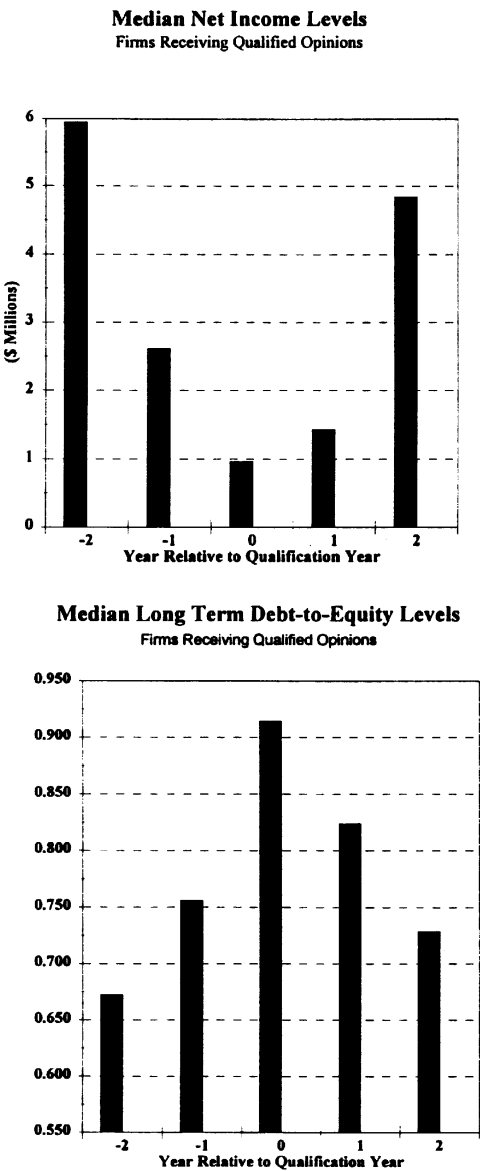


Figure 1 (Continued)

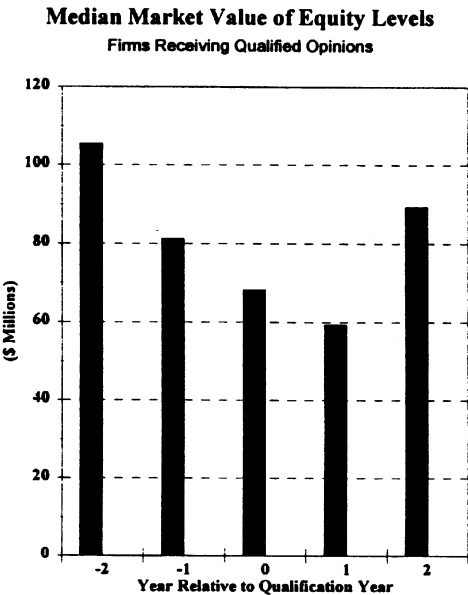
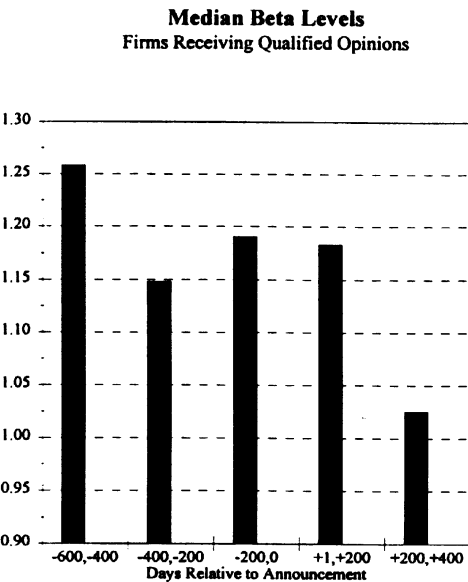


Table 1

Results of Tests for Changes in Systematic Risk for Firms Having Publicly Announced Qualified Opinions

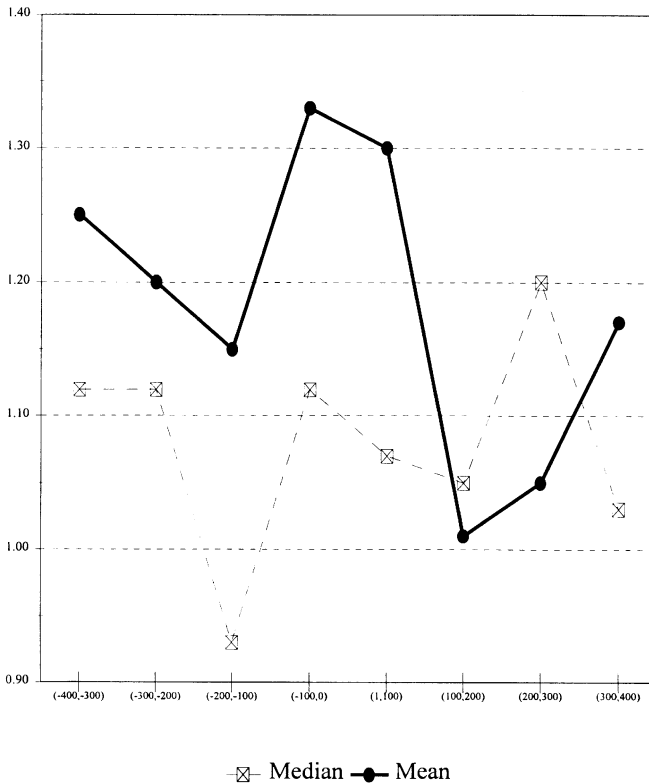
Panel A: Complete Sample					
	N	α_1	α_2	β_1	β_2
All firms:					
Mean	106	-0.0016*	0.0016*	1.2549*	-0.0436
Median		-0.0001*	0.0014*	1.1909*	-0.0135
Positive:Negative		25:81	71:35	105:1	52:54
Panel B: Initial versus Recurring Qualifications					
	N	α_1	α_2	β_1	β_2
Firms announcing initial qualifications:					
Mean	71	-0.0017*	0.0019*	1.1385*	0.0084
Median		-0.0009*	0.0014*	0.9983*	0.0874
Positive: Negative		17:54	50:21	70:1	37:34
Firms announcing recurring qualifications:					
Mean	35	-0.0015*	0.0011*	1.4910*	-0.1493
Median		-0.0017*	0.0001*	1.4752*	-0.1871
Positive:Negative		8:27	21:14	35:0	15:20
Wilcoxon Test for equality of β_1 across subsamples				$\chi^2 = 2.64$ ($p=0.01$)	
Wilcoxon Test for equality of β_2 across subsamples					$\chi^2 = 1.21$ ($p=0.23$)

Notes:
Coefficients are based on the following model, estimated from day -200 through day +200: $R_{it} = \alpha_{1i} + \alpha_{2i}D_i + \beta_{1i}R_{mt} + \beta_{2i}(R_{mt}^*D_i) + \epsilon_{it}$, where D is equal to 0 for days -200 through 0, and is equal to 1 for days +1 through +200. The model is estimated for each firm and the distribution of coefficients (summarized in the table) provides the basis for the empirical tests.
* Denotes significance at $p \leq 0.05$ (two-tailed).

procedure eliminated four announcements, resulting in a final sample of 106 announcements. Panel A of Table 1 reveals that the sample is comprised of relatively high risk firms, with a mean (pre-announcement) beta of 1.25 and a median beta of 1.19. However, the coefficient on the change in systematic risk (β_2) is not significantly different from zero. Furthermore, less than half of the firms (52/106) exhibit an increase in systematic risk around the qualification announcement. These results fail to support the hypothesis that there is an

Figure 2

Changes in Mean and Median Beta Levels Calculated Across 100-Day Intervals to Public Announcements of Qualified Audit Opinions



average increase in systematic risk following announcements of qualified audit opinions.¹⁰

One reason for the absence of a significant risk shift may be that qualification announcements in general tend to follow other forms of disclosure. For example, most public announcements (i.e., media disclosures) of qualified opinions occur after the information has already been presented in firms' annual reports. As a result, it is reasonable to expect that a shift in risk may occur prior to the public announcement, particularly if the shift is attributable to the underlying economic events giving rise to the qualification. This possibility is examined in Figure 2. Figure 2 illustrates changes in mean and median betas calculated over 100-day intervals around the qualification announcements. Both mean and median systematic risk appear to increase most significantly during the period *prior* to announcement (interval $-100,0$) with little change

observed during the first post-announcement interval. Furthermore, during the second post-announcement interval systematic risk appears to decrease significantly. We conjecture that the decrease may be attributable to some firms satisfactorily resolving the material uncertainties that gave rise to the qualifications. In short, the data presented in Figure 2 suggest that qualifications may be associated with increases in risk, but that partitioning based on the public announcement is not sufficient to identify such increases. Specifically, much of the positive risk shift appears to occur prior to the qualification announcement.

Initial versus Recurring Qualifications

The results from the previous section suggest that an increase in risk may be commensurate with the issuance of a qualified opinion, but that identifying the point at which the shift occurs is difficult. To examine this relation further, we partitioned the sample into firms announcing an initial qualification – that is, firms with announcements of the first-reported qualification on COMPUSTAT – and firms announcing recurring qualifications. The information content of the qualification announcement should be higher for firms announcing initial qualifications. As a result, we expect the shift in risk to be more positive for this sample than for the sample of firms announcing recurring qualifications.

Panel B of Table 1 provides mean and median coefficient estimates for the two subsamples. Although the median increase in risk is positive (0.08) for firms announcing initial qualifications and negative (−0.18) for firms announcing recurring qualifications, neither estimate is statistically significant and the difference between the two coefficients is insignificant as well. What is apparent from Panel B, however, is that the pre-announcement level of systematic risk for firms announcing recurring qualifications is significantly higher than that of firms announcing initial qualifications. The mean (median) pre-announcement coefficient for the former group of firms is 1.49 (1.47) as opposed to 1.13 (0.99) for the latter group. Thus, firms that fail to resolve their material uncertainties experience higher levels of systematic risk, a finding which is generally consistent with the trend depicted in Figure 2. Specifically, qualified opinions are associated with changes in systematic risk, but it is difficult to determine the point at which risk levels begin to increase.

Qualification Withdrawals

Fields and Wilkins (1991) document a significantly positive share price response for publicly announced qualification withdrawals, attributing the effect to the fact that such announcements typically precede other forms of disclosure.¹¹ In other words, most announcements stating that material uncertainties have been satisfactorily resolved are made prior to the audit report

included in firms' year-end filings.¹² Because qualification withdrawal announcements tend to provide more timely information, they may provide the cleanest test of the association between audit opinions and changes in systematic risk as well. To examine this possibility, we tested for shifts in systematic risk around publicly announced qualification withdrawals. If qualifications are positively associated with changes in systematic risk, then qualification withdrawals should be followed by significant decreases in equity beta.

Figure 3 provides summary data for firms announcing qualification withdrawals. Our sample is comprised of the 52 firms utilized by Fields and Wilkins (1991), which were collected from both the *Wall Street Journal Index* and the *Dow Jones News Retrieval Service* from 1970 through 1989. After imposing the screen for influential outliers, 50 withdrawal announcements remain in the sample. Firms announcing qualification withdrawals experience steadily increasing long-term debt levels and steadily increasing equity values across the five-year period. To the extent that increases in leverage increase systematic risk, the increase in leverage should reduce the ability of our tests to detect a decrease in systematic risk following a qualification withdrawal. Median equity betas, however, appear to exhibit the trend that we expect. Specifically, based on a Wilcoxon test, median systematic risk calculated over the two hundred days following the announcement (beta of 1.06) is significantly lower than in the two hundred days prior to the qualification announcement (beta of 1.29).

Table 2 presents formal tests for decreases in systematic risk around announcements of audit qualification withdrawals. The withdrawal firms are less risky than firms in the qualification sample, but still have a higher pre-announcement systematic risk level (mean beta = 1.18) than the market average. The mean coefficient for the shift in risk, β_2 , is negative (-0.14) and significant at less than the five percent level, indicating that qualification withdrawal announcements are followed by significant decreases in systematic risk. Given that no significant shift was found for announcements of qualified opinions, these findings suggest that information timeliness is important in assessing the changes in risk that are associated with qualified audit opinions.

To refine our analysis further, we partitioned the sample of withdrawal announcements into firms with publicly announced withdrawals before annual report disclosure and firms with announcements that are made after annual report disclosure. Announcements that occur prior to the release of the annual report should have greater information content and hence should provide a stronger test of our hypothesis. Panel B of Table 2 shows that for the subsample of firms with publicly announced withdrawals prior to annual report disclosure, the mean coefficient on the decline in risk is negative (-0.28 , median = -0.30) and significant. Furthermore, 63% of the firms represented in this subsample exhibit a decline in systematic risk following the withdrawal announcement. In contrast, no significant decrease in equity beta is found for firms announcing the withdrawal after its original annual report disclosure.

Figure 3

Changes in Median Values for Selected Summary Measures Surrounding
Public Announcements of Withdrawn Qualified Audit Opinions

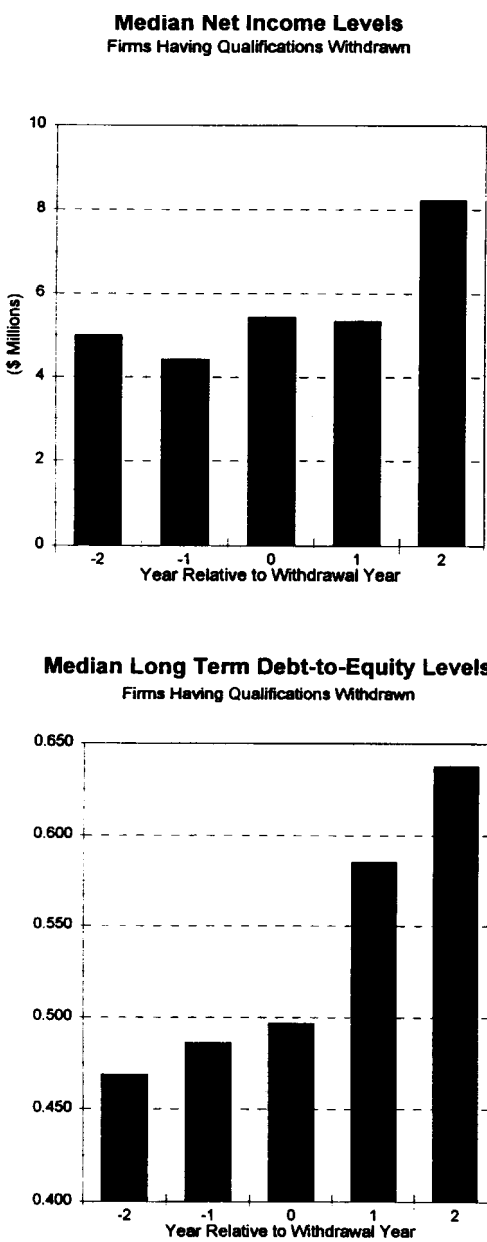


Figure 3 (Continued)

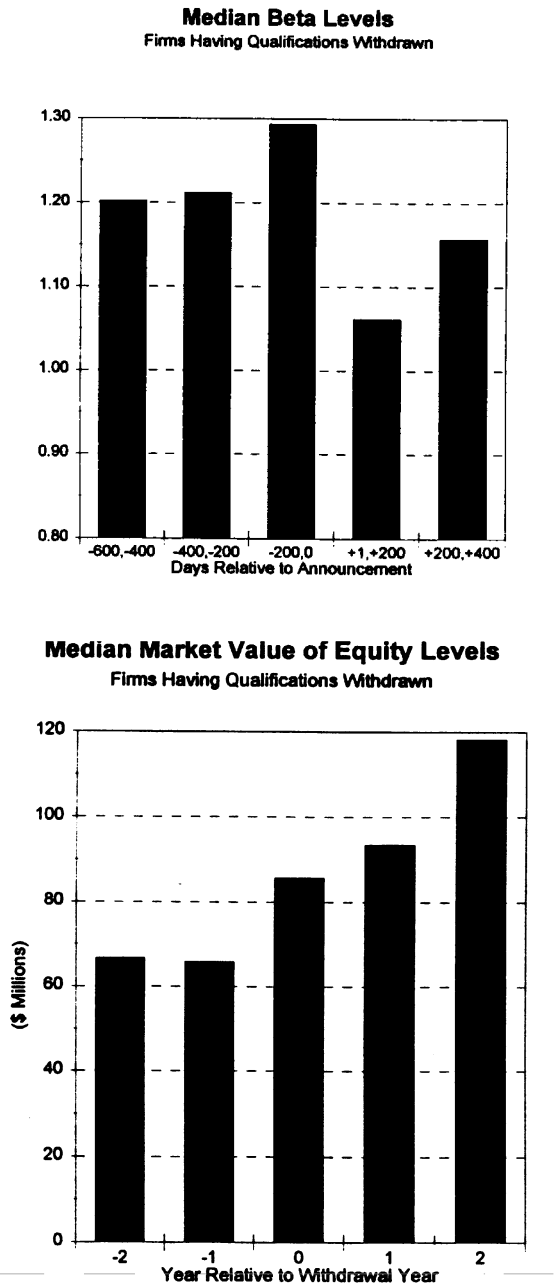


Table 2

Results of Tests for Changes in Systematic Risk for Firms Having Publicly Announced Qualification Withdrawals

Panel A: Complete Sample					
	N	α_1	α_2	β_1	β_2
All firms:					
Mean	50	0.0002	−0.0006	1.1806*	−0.1431*
Median		0.0002	−0.0001	1.2939*	−0.1651
Positive:Negative		28:22	23:27	49:1	23:27
Panel B: Timely versus Untimely Announcements					
	N	α_1	α_2	β_1	β_2
Firms with publicly announced withdrawal prior to disclosure in annual report:					
Mean	27	0.0003	−0.0009	1.3844*	−0.2851*
Median		0.0003	−0.0001	1.3930*	−0.3000*
Positive:Negative		16:11	13:14	27:0	10:17
Firms with publicly announced withdrawal after disclosure in annual report					
Mean	23	0.0001	−0.0002	0.9414*	0.0236
Median		0.0002	−0.0002	1.0325*	0.1729
Positive:Negative		12:11	10:13	22:1	13:10
Wilcoxon Test for equality of β_1 across subsamples				$\chi^2=2.34$ ($p = 0.02$)	
Wilcoxon Test for equality of β_2 across subsamples				$\chi^2=2.71$ ($p = 0.01$)	

Notes:
Coefficients are based on the following model, estimated from day −200 through day +200: $R_{it} = \alpha_{1i} + \alpha_{2i}D_i + \beta_{1i}R_{mt} + \beta_{2i}(R_{mt}^*D_i) + \epsilon_{it}$, where D is equal to 0 for days −200 through 0, and is equal to 1 for days +1 through +200. The model is estimated for each firm and the distribution of coefficients (summarized in the table) provides the basis for the empirical tests.
* Denotes significance at $p \leq 0.05$ (two-tailed).

These findings suggest, as expected, that announcements that have not been pre-empted by other forms of disclosure have the greatest information effect.¹³ Additional tests reported in Panel B show that the *pre-announcement* beta (β_1) is significantly lower for firms announcing withdrawals after annual report disclo-

sure than for firms publicly announcing withdrawals prior to annual report disclosure. In other words, because information regarding the withdrawal has already been disseminated (via the audit report) for the first group of firms, the risk level of these firms appears to have already adjusted downward by the time of the public announcement. This result is comparable to our findings regarding qualification announcements in that the ability to detect changes in systematic risk is heavily influenced by the timeliness of the disclosure.¹⁴

Unsystematic Risk

In addition to affecting systematic risk, the material uncertainties highlighted in audit reports can be expected to influence the unsystematic, diversifiable risk of the firm.¹⁵ While systematic risk is of primary interest to investors, other parties may be concerned with changes in unsystematic (i.e., firm-specific) risk. Such information should be valued, for example, by lenders, rating agencies, suppliers, regulators, unions, and employees as they evaluate a firm's ability to satisfy its existing business contracts.¹⁶ To test for changes in unsystematic risk we calculated the variance of the residuals from market models estimated during the period prior to announcement and during the period after announcement. As in Healy and Palepu (1990), firm-specific F -statistics were then calculated as the ratio of the two residual variances. The significance of the sample distribution of these F -statistics forms the basis for the unsystematic risk analysis. The test statistic is calculated as follows:

$$-2 \sum_{j=1}^N \ln p_j \quad (3)$$

where p_j is the probability value associated with the F -statistic for firm j and N is the number of firms in the sample. Under the null hypothesis that the sample distribution of F -statistics is no different from that expected by chance, the statistic represented by equation (3) is distributed chi-square with $2N$ degrees of freedom.¹⁷ Hypothesis two, stated in alternative form, is provided below:

H₂: Residual variance increases (decreases) subsequent to announcements of qualified opinions (qualification withdrawals)

Table 3 presents results for the unsystematic risk tests. The results provide strong evidence of an increase in unsystematic risk around qualification announcements and a decrease in unsystematic risk around withdrawal announcements. For the qualification sample, the residual variance increases from a mean of 0.14% in the pre-qualification period to a mean of 0.24% in the post-qualification period. The difference is significant at the five percent level (chi-square statistic = 364.33), and is found to be largest for firms announcing initial qualifications. Comparable findings hold for firms announ-

Table 3

Results of Tests for Changes in Unsystematic Risk for Firms Announcing Qualifications and Qualification Withdrawals

Panel A: Firms Announcing Qualified Opinions				
<i>Firms Included</i>	<i>N</i>	<i>σ_ε² Before Announcement</i>	<i>σ_ε² After Announcement</i>	<i>χ² Statistic for Increase σ_ε²</i>
All Firms	106	0.14%	0.24%	364.33*
Firms announcing initial qualifications	71	0.13%	0.26%	236.18*
Firms announcing recurring qualifications	35	0.14%	0.22%	128.26*
Panel B: Firms Announcing Qualification Withdrawals				
<i>Firms Included</i>	<i>N</i>	<i>σ_ε² Before Announcement</i>	<i>σ_ε² After Announcement</i>	<i>χ² Statistic for Decrease σ_ε²</i>
All Firms	50	0.11%	0.10%	135.54*
Firms announcing with- drawals before disclosure in annual report	27	0.14%	0.11%	88.51*
Firms announcing with- drawals after disclosure in annual report	23	0.08%	0.09%	47.03

Notes:
Tests are based on residual variances from market models estimated for each firm in both pre- and post-announcement periods. The ratio of the residual variances provides an *F*-statistic for each firm. Aggregate test statistics (χ^2) are based on the resulting probability values (see text for details).
* Denotes significance at $p \leq 0.05$.

cing qualification withdrawals. For these firms, the residual variance decreases from a mean of 0.11% in the pre-withdrawal period to a mean of 0.10% in the post-withdrawal period. As with the qualification sample, the difference is significant at the five percent level (chi-square statistic = 135.54) and is most pronounced for firms with more timely information disclosures. In sum, both qualification and qualification withdrawal announcements are associated with significant changes in the unsystematic risk of affected firms.

CONCLUSIONS

Market-based studies involving ‘subject-to’ opinions have yielded mixed results

regarding the information content of qualification announcements. This study focuses on the changes in risk around announcements of qualifications and around the more timely announcements of qualification withdrawals. Although our tests do not isolate the shift in risk around qualification announcements, we do show that firms announcing recurring material uncertainties have higher levels of systematic risk than firms announcing initial qualifications. Furthermore, we document a significant decrease in systematic risk for firms publicly announcing qualification withdrawals. These results are consistent with announcements of qualification withdrawals providing greater (i.e., more timely) information to capital market participants than announcements of qualified opinions, which are more likely to have been pre-empted by alternative sources of information.

Our findings also indicate that unsystematic, or firm-specific, risk changes significantly around qualification and withdrawal announcement dates. Combined with our results regarding systematic risk, the data indicate that qualifications provide investors and other external users with information that is relevant to the evaluation of firm risk. In selecting a sample of announcements where the qualification was made prior to *SAS No. 58*, we gained comparability with previous studies and retained the objective identification of qualification announcements. Similar to previous studies, however, we cannot unambiguously separate the information regarding the material uncertainties giving rise to the qualification from the information conveyed by the qualification itself.

Future research is needed to more effectively address the extent to which auditors evaluate information that is not available to other financial statement users. Furthermore, additional work is needed to determine how this information can be communicated most effectively to investors, creditors and other interested parties.

NOTES

- 1 The term, 'red flag', is used in financial analysis to indicate that the analyst should examine certain items more closely. The list of red flags noted by Palepu, Bernard and Healy (1996) includes qualified audit opinions.
- 2 This is not to say that audit qualifications cause changes in risk; rather, qualifications likely highlight economic conditions that give rise to changes in risk.
- 3 Choi and Jeter (1992, Table 3 p. 240) detect no change in systematic risk between pre-qualification and post-qualification periods for a sample of 'subject-to' qualifications. The purpose of their study, however, was to investigate changes in earnings response coefficients rather than changes in risk. Our study is specifically designed to examine whether the announcement of a qualified audit opinion is a sufficient event for identifying a shift in risk.
- 4 For qualification withdrawals, we document a significant decrease in risk. The change in risk following qualification withdrawals is expected to be negative because the previously outstanding material uncertainties have been resolved.
- 5 See Elliott (1982) for detailed discussion of the types of qualifications issued and references to the appropriate professional standards.
- 6 If qualification announcements follow other forms of disclosure, trading days that should be

- included in the post-announcement period may be included in the pre-announcement period. If the effect of the qualification is to increase risk, this misclassification will overstate pre-announcement risk levels, making the detection of a shift in risk less likely.
- 7 In our empirical tests, R_m is defined as the return on the equally-weighted market index.
 - 8 Controlling for a shift in the intercept is important for two reasons. First, to the extent that the intercept varies with the risk-free rate of interest, the intercept is not expected to remain constant over time. Second, because the slope coefficient is mechanically related to the intercept in a one factor model, holding the intercept constant can lead to spurious measurement of a change in the slope.
 - 9 As a sensitivity test, we partition based on going concern versus non-going concern opinions. Because our results are not changed by this partition, however, discussions of the empirical tests include all types of 'subject-to' opinions.
 - 10 In the interest of completeness, we also tested for stock price reactions to qualification announcements. Similar to Dopuch, Holthausen and Leftwich (1986), we find significantly negative abnormal returns when qualified opinions are announced.
 - 11 Similar conclusions are reached by Dodd et al. (1984) and Dopuch et al. (1986) in their studies of qualified opinions.
 - 12 Fields and Wilkins (1991) show that most publicly announced withdrawals are made within one year of the initial qualification, and that over half of the publicly announced withdrawals precede annual report disclosures.
 - 13 We also replicated the share price tests of Fields and Wilkins (1991). Similar to Fields and Wilkins (1991), we find that withdrawal announcements are associated with a positive average share price response, and that the average price effect is attributable primarily to the subsample of firms with more timely announcements.
 - 14 Our tests for both qualifications and qualification withdrawals reveal that the observed shifts in systematic risk stem from changes in returns variance as opposed to changes in the correlation with market returns. That is, qualified opinions are followed by a significant ($p < 0.001$) increase in returns variance while qualification withdrawals are followed by a significant ($p < 0.001$) decrease in returns variance.
 - 15 Beaver et al. (1979) and Miller and Scholes (1972), among others, note that systematic and unsystematic risk may be jointly determined. That is, the two elements of total risk are not completely independent.
 - 16 Kaplan and Urwitz (1979) also use unsystematic risk as a predictor of bond ratings.
 - 17 Values of β_j less than 0.05 are set equal to 0.05 before taking the log in order to reduce the impact of small values and produce a more conservative test statistic.

REFERENCES

- American Institute of Certified Public Accountants (1988a), *Statement on Auditing Standards No. 58, Reports on Audited Financial Statements* (New York: AICPA).
- (1988b), *Statement on Auditing Standards No. 59, The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* (New York: AICPA).
- Ball, R. J., R. Walker and G. Whittred (1979), 'Audit Qualifications and Share Prices', *Abacus*, Vol. 15 (June), pp. 23–34.
- Beaver, W., R. Clarke and W. Wright (1979), 'The Association Between Unsystematic Security Returns and the Magnitude of Earnings Forecast Errors', *Journal of Accounting Research*, Vol 17, pp. 316–40.
- Campbell, J. and J. Mutchler (1988), 'The "Expectations Gap" and Going-concern Uncertainties', *Accounting Horizons*, Vol. 2 (March), pp. 42–9.
- Chen, K. C. W. and B. K. Church (1996), 'Going Concern Opinions and the Market's Reaction to Bankruptcy Filings', *The Accounting Review* (January), pp. 117–28.
- Choi, S. K. and D. C. Jeter (1992), 'The Effects of Qualified Audit Opinions on Earnings Response Coefficients', *Journal of Accounting and Economics*, Vol. 15, pp. 229–47.
- Dodd, P. N., N. Dopuch, R. W. Holthausen and R. W. Leftwich (1984), 'Qualified Audit Opinions and Stock Prices: Information Content, Announcement Dates, and Concurrent Disclosures', *Journal of Accounting and Economics*, Vol. 6 (April), pp. 3–38.

- Dopuch, N., R. W. Holthausen and R. W. Leftwich (1986), 'Abnormal Stock Returns Associated with Media Disclosures of 'Subject-to' Qualified Audit Opinions', *Journal of Accounting and Economics*, Vol. 8 (June), pp. 93–117.
- Elliott, J. A. (1982), '“Subject-to” Audit Opinions and Abnormal Security Returns: Outcomes and Ambiguities', *Journal of Accounting Research*, Vol. 20 (Autumn), pp. 617–37.
- Fields, L. P. and M. S. Wilkins (1991), 'The Information Content of Withdrawn Audit Qualifications: New Evidence on the Value of “Subject-to” Opinions', *Auditing: A Journal of Practice and Theory*, Vol. 10 (Fall), pp. 62–9.
- Firth, M. (1978), 'Qualified Audit Reports: Their Impact on Investment Decisions', *The Accounting Review* (July), pp. 642–50.
- Hamada, R. (1972), 'The Effect of the Firm's Capital Structure on the Systematic Risk of Common Stock', *Journal of Finance* (May).
- Healy, P. M. and K. G. Palepu (1990), 'Earnings and Risk Changes Surrounding Primary Offers', *Journal of Accounting Research* (Spring), pp. 25–48.
- Kaplan, R. and G. Urwitz (1979), 'Statistical Models of Bond Ratings: A Methodological Inquiry', *Journal of Business* (April), 231–61.
- Keller, S. B. and L. F. Davidson (1983), 'An Assessment of Individual Investor Reaction to Certain Qualified Audit Opinions', *Auditing: A Journal of Practice & Theory* (Fall), pp. 1–22.
- Kinney, W. R. Jr. and K. A. Smith (1992), 'Auditors' Business Risk and Modified Audit Reports', Working Paper (University of Texas Austin).
- Miller, M. and M. Scholes (1972), 'Rates of Return in Relation to Risk: A Re-examination of Some Recent Findings', *Studies in the Theory of Capital Markets* (New York: Praeger).
- Nogler, G. E. (1995), 'The Resolution of Auditor Going Concern Opinions', *Auditing: A Journal of Practice & Theory* (Fall), pp. 54–73.
- Palepu, K., V. Bernard and P. Healy (1996), *Business Analysis and Valuation* (South-Western Publishing Company, Cincinnati, OH), pp. 3–11.