

# Client Stock Price Reaction to the PricewaterhouseCoopers Merger

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**ABSTRACT:** This paper examines the market reactions to the merger of Coopers & Lybrand (CL) and Price Waterhouse (PW), the fifth- and the sixth-largest accounting firms in the U.S. in 1997 and 1998. Empirical results indicate that, when the merger plan was announced, there is no significant abnormal return on either the portfolio of CL clients, PW clients, or clients of both accounting firms. When forming a portfolio based on the audit clients' financial conditions, we find that financially distressed clients experience significantly positive abnormal returns around the date of announcement, while the financially healthy clients do not. The results of multivariate regression also confirm that the abnormal return is significantly related to the client's financial condition. Such results imply that a financially distressed client will benefit more from the merger of its accounting firm. Overall, the results are consistent with the assertions of the insurance hypothesis.

**Key Words:** *Merger, Market Reaction, Audit Quality, Monitoring Hypothesis, Insurance Hypothesis*

## INTRODUCTION

Merger and acquisition have been methods for many businesses to grab market share in the competitive markets. They are even the last resort for some businesses to survive and not to go out of business. Accounting profession is no exception. In 1989, Ernst & Whinney merged with Arthur Young, which created Ernst & Young; Deloitte, Haskins & Sells and Touche Ross merged to form Deloitte & Touche. In this merger wave, the Big 8 shrank to the Big 6. On September 18, 1997, Coopers & Lybrand (CL) and Price Waterhouse (PW), at the time the fifth- and the sixth-largest accounting firms in the U.S., announced to establish the world's accounting giants, with combined annual fees of \$11.8 billion in worldwide in 1996 and about 135,000 employees across the globe. The accomplishment of this merger created PricewaterhouseCoopers (PwC) on July 1, 1998, further reducing the Big 6 accounting firms to the Big 5. The purpose of this paper is to study the market reactions to the announcement of the merger plan of CL and PW.

Some claim that the merger of accounting firms can provide more integrated services with professionals in various industries, and therefore can better satisfy clients' needs and expectations. On the other hand, some criticize that, although the merger could increase audit quality, consumers' selections are reduced and audit fees are increased due to the monopoly power of the accounting firms.

Prior research on the merger of accounting firm usually focuses on its effect on market competition by examining the levels of auditor concentration (e.g., Minyard and Tabor 1991; Wootton et al. 1994; Francis et al. 1999; Wolk et al. 2001; Thavapalan et al. 2002) or the switch of auditors (Sullivan 2002). On the other hand, Healy and Lys (1986)

study the reactions of the clients of the non-Big 8 accounting firms to mergers of their auditors with the Big 8 accounting firms. They find that clients that do not benefit from the Big 8 firm's reputation or specialized service are more likely to change to a non-Big 8 accounting firm following the merger. Although Healy and Lys (1986) and our paper both study the consequence of the accounting firm merger with regard to the firms' clients, ours focuses on the clients' stock price reaction. In contrast to auditor change, which is costly and time-consuming, we believe that examining the stock price reaction is a more direct way to measure the effect of the merger on audit clients.

In addition, previous research on audit clients' stock price reactions to the disclosure of a certain event related to their accounting firms usually draws on a negative event as a research target and more often than not finds significantly negative effect on audit clients' stock prices. For example, Chaney and Philipich (2002), Callen and Morel (2002), and Krishnamurthy et al. (2002) investigate the impact of the Andersen's audit failure in the Enron audit on Andersen's non-Enron clients. Menon and Williams (1994) and Baber et al. (1995) examine the effect of Laventhol & Horwath bankruptcy on its clients. Franz et al. (1998) study the impact of the litigation against audit firms on the firms' non-litigating clients. Firth (1990) assesses the impact of critical reports issued by U.K. Department of Trade on auditor's reputation. Above all, he studies the stock price reactions of the auditor's listed clients. However, previous research indicates that investors react asymmetrically to good news and bad news (e.g., Brown et al. 1988, McQueen et al. 1996). Therefore, it is not clear whether we can speculate the impact of positive information with regard to the accounting firm on its audit clients' stock price by just inverting the results of the research on clients' market reactions to the negative events.

This paper alternatively uses the announcement of the merger plan of two Big 8 accounting firms, which is normally regarded as a positive event, as research object. It broadens our understanding of the audit clients' stock price reaction to different types of events with respect to the auditors.

We derive our predictions of the market responses to the announcement of CL and PW merger plan from the monitoring hypothesis and the insurance hypothesis (Wallace 1980, 1987). If audit quality increases after an accounting firm merger, as usually claimed by the merging firms, more effective monitoring is achieved. Stockholders will raise their valuation of the auditees, which results in higher stock return immediately after the merger. Further, the merger increases the accounting firm's funds available to settle litigation when an audit failure occurs. Since stock price is the present value of the expected future cash flows, more indemnity secured from auditors in case of an audit failure also means a higher stock price. Therefore, *ceteris paribus*, the merger of accounting firms will have positive effects on their clients' stock prices based on either the monitoring hypothesis or the insurance hypothesis. In addition, the magnitude of the market reaction will be greater for clients with a higher demand for the monitoring or insurance functions.

Our results indicate that, when either CL clients, PW clients, or all clients of both accounting firms are viewed as a portfolio, there is no significant abnormal return when the merger plan was announced. No significant difference exists between the market reaction of the rapidly growing clients and that of the slowly growing clients. However, when forming the portfolio based on the clients' financial condition, we find that financially distressed clients experience significantly positive abnormal returns around

the event date, while the financially healthy clients do not. The results of multivariate regression also indicate that the abnormal return is significantly related to the client's financial condition but not the rate of growth in sales. Overall, the results imply that the benefits of the merger of two Big 8 accounting firms to their clients mainly come from the increase in the funds available to settle litigation when an audit failure occurs, rather than from the higher audit quality.

The remainder of the paper is organized as follows. The next section reviews prior literature and develops hypothesis. We then describe the methods and variables employed in this paper, followed by the empirical analysis and results. The final section provides a summary and discussion of our findings.

## **LITERATURE REVIEW AND HYPOTHESIS**

### **Monitoring Hypothesis**

According to the agency theory, the agent (manager) will not always act in the best interests of the principal (shareholder) since both the principal and the agent want to maximize their own utilities (Jensen and Meckling 1976). Divergent actions by a manager to pursue his/her own benefit at the expense of the stockholders can be prevented by an effective monitoring mechanism. Agency theory holds that the manager has an incentive to be monitored since, in the absence of monitoring, stockholders will rationally expect the manager's divergent actions and "price-protect" themselves by lowering their valuation of the company. There are several ways to monitor agents. An audit is one of them. DeAngelo (1981) indicates that, the larger the audit firms, the more independent the auditors and thus, given the same audit technology, the higher the audit

quality. Dye (1993, 1995) demonstrates that an auditor's wealth at risk serves as a bond offered by the auditor. The more an auditor's wealth is at risk, the more incentive the auditor has to exert effort. Therefore, in the lack of audit independence problem, the wealthier an auditor is, the higher the audit quality. In addition, by merging with other audit firms, an auditor can alter his wealth at risk (Dye 1995, 104). Hence, a merger of accounting firms will enhance the audit quality and reduce the agency problem between the manager and stockholders. We can infer that, *ceteris paribus*, stockholders will raise their valuation of the auditees, which results in higher stock prices.

### **Insurance Hypothesis**

Insurance hypothesis indicates that when an investor purchases securities and subsequently suffers losses, the investor would like to demand someone to compensate for his/her losses. Since auditors are usually viewed as "deep pockets", investors often desire to include the auditor as a co-defendant in a lawsuit (Carcello and Palmrose 1994). That is, the auditor plays an insurance role against corporate failure. In addition, underwriters, investment bankers, and managers who have professional liability exposure for their participation in a company's financial disclosure practices have motivation to get themselves insured by auditors' involvement (Wallace 1980). The larger the accounting firm, the higher the insurance provided by the auditor. Since a merger of accounting firms increases the funds available to compensate investors' losses when a corporate failure occurs and stock price is the present value of the expected future cash flow, the insurance hypothesis implies that audit clients' price will react positively to the announcement of the merger plan of their accounting firms.

Previous research provides inconsistent evidence with respect to insurance hypothesis. Schwartz and Menon (1985) examine auditors switches by failing companies and hypothesize that failing companies may change to larger accounting firms for additional insurance against potential legal liability in case of a corporate failure. However, the evidence shows that a substantially greater proportion of failing companies formerly audited by Big 8 switch to non-Big 8 successors, which is inconsistent with the insurance hypothesis. Menon and Williams (1994) and Baber et al. (1995) explore the audit clients' stock price reactions to the announcement of bankruptcy of Laventhol & Horwath, the then-seventh-largest accounting firm. The evidence shows that there is significantly negative abnormal return for Laventhol & Horwath clients, consistent with the insurance hypothesis. Chung et al. (1998) test the insurance hypothesis by examining the market reactions of the Big 6 auditees to the announcement of the Big 6's conversion to limited liability partnerships (LLPs). The hypothesis is supported by the evidence that significantly negative abnormal returns appear around the time of the formation of LLPs. Muzatko et al. (2004) investigate the underpricing in the initial public offering (IPO) before and after the change of the accounting firms' structure from general partnerships to LLPs and hypothesize that underwriters would increase IPO underpricing to protect themselves from the reduction in funds available from accounting firms as co-defendants. Their findings are consistent with the insurance hypothesis.

The above discussion of suggests the following hypothesis:

**H:** The announcement of the merger plan of CL and PW has positive effects on the stock price of clients with greater monitoring and insurance demand.

## **MEGHODOLOGY**

### **Sample Selection**

Our sample consists of 807 CL and PW clients included in the Compustat database. The merger plan of CL and PW was announced on September 18, 1997. According to the monitoring and insurance hypotheses, a client of CL or PW will benefit from the merger for higher audit quality or more funds available to settle the potential lawsuit only if the client is also audited by the post-merger PwC. That is, if a CL or PW client was planning to switch auditor when the merger plan was released, the benefit of the merger to the client would be very little, if any. Therefore, our sample includes companies whose 1996, 1997 (1998 and 1999) financial statements were audited by pre-merger CL or PW (post-merger PwC). Besides, in order to be included in the sample, a company must meet the following two criteria: first, the daily stock returns of the company must be available from CRSP database and the matching financial data must be available from Compustat database; second, companies in the financial, insurance, and real estate industries, i.e., SIC code 6000-6999, are deleted because the financial characteristics of these companies are quite different from those of the others.

### **Event Study**

Event studies have been applied to a variety of events, such as earnings announcements, stock splits announcements, etc. For the event studies on earnings or stock split announcements, not every sample firm makes the announcement on the same date; thus, the event windows do not overlap and the covariance among abnormal returns can be assumed zero. In contrast to these studies, the event dates for all the sample

companies are the same in this paper. If we fail to take such cross-sectional correlations into account, errors in inference are likely to occur. Hence, in this study, we follow the suggestion by Chandra and Balachandran (1990) to form a portfolio of clients of interest for use in the regression. The estimation period begins on July 12, 1996 and ends on September 25, 1997, five trading days after the announcement (306 trading days in total). The abnormal returns during the period around the announcement of the merger plan (September 11-25, 1997) are estimated by the following regression:

$$R_{pt} = \alpha_p + \beta_p \cdot R_{mt} + \sum_{i=-5}^5 r_{pi} \cdot D_{it} + \varepsilon_{pt} \quad (1)$$

where:

- $t$  = date relative to the announcement date ( $t = 0$ ), only trading days are counted.  $t \in [-300, 5]$ . Five trading days prior to and post the event date (11 days in total) constitute the event window;
- $R_{pt}$  = the equally weighted average return on the clients' return portfolio on day  $t$ ;
- $R_{mt}$  = the market return on day  $t$ , consisting of those listed on New York, American, and NASDAQ Exchanges included in the CRSP daily market return indexes; and
- $D_{it}$  = dummy variable that equals 1 when  $t = i$ , otherwise 0.

By adding dummy variables  $D_{it}$  into the regression equation (1), we can capture abnormal returns of the portfolio on event date by the coefficient  $r_{p0}$ . That is, if  $r_{p0}$  is significantly different from zero, then we can infer that there is significant abnormal return on event date. The cumulative abnormal return of the portfolio is obtained by summing  $r_{pi}$ . For example, the cumulative abnormal return starting from two days before

the announcement till two days after can be computed as  $CAR(-2, 2) = \sum_{i=-2}^2 r_{pi}$ .

In order to see whether the cumulative abnormal returns are correlated with clients' monitoring and/or insurance demand, we use the following model that regresses cumulative abnormal returns on variables serving as proxies for clients' monitoring and insurance demand.

$$CAR = b_0 + b_1 ZFC + b_2 SIZE + b_3 GROWTH + b_4 OPINION + b_5 AUDITOR + u \quad (2)$$

where:

*CAR* = cumulative abnormal return;

*ZFC* = the probability of financial distress, computed as in Zmijewski (1984) with amounts from the financial statements for the year ended December 31, 1996;

*SIZE* = the natural logarithm of net sales in 1996;

*GROWTH* = the rate of growth in sales from 1996 to 1997;

*OPINION* = a dummy variable, which equals 1 if the audit opinion for 1996 is unqualified, and 0 otherwise; and

*AUDITOR* = a dummy variable, which equals 1 if the pre-merger auditor is PW, and 0 if CL.

### ***Dependent Variable***

The cumulative abnormal return (*CAR*) for each client during the window period  $(-i, i)$  is obtained from summing the coefficients for dummy variables  $D_{it}$  in a regression

similar to equation (1) with the stock return for *each client* on day  $t$  as the dependent variable, instead of using the *portfolio* return.

### ***Independent Variables Related to Monitoring Hypothesis***

With respect to a client's monitoring demand, we use both client size (*SIZE*), measured as the natural logarithm of sales, and rate of growth in sales from 1996 to 1997 (*GROWTH*) as proxies. The larger the client is, the higher the demand on good control mechanism. Therefore, we expect the coefficient  $b_2$  to be positive. However, size may proxy for other effects as well. For example, Carcello and Palmrose (1994) indicate that auditor litigation is more likely for larger client. Then, if we observe a positive  $b_2$ , it can be due to both monitoring demand and insurance demand. Besides, the information availability may be different across clients with different sizes. That is, there may be more competing sources of information for larger companies and, on average, the stock price reaction to the disclosure of a piece of information will be less significant for larger companies (Atiase 1985; Collins et al. 1987). In this case, the sign of  $b_2$  will tend to be negative. With these two countervailing effects, the sign of  $b_2$  is thus indeterminable.

Due to the vagueness of *SIZE* as a proxy for monitoring demand, we include *GROWTH* as another proxy. A rapidly growing company may have higher geographic dispersion and reporting complexity (Healy and Lys 1986) and can give rise to significant changes in both the revenue/receipt and expenditure/disbursement transaction cycles, which in turn can overburden the client's internal control system and reduce its ability to properly process transactions (Pratt and Stice 1994). In addition, higher rate of growth in sales may imply a company's employment of aggressive revenue recognition procedures

(Chaney and Philipich 2002). Therefore, a rapidly growing client has a greater demand on audit quality and can benefit more from the merger. We expect coefficient  $b_3$  to be positive.

### ***Independent Variables Related to Insurance Hypothesis***

The insurance hypothesis is based on an auditor's loss-sharing role when a corporate failure occurs. Reliance on an auditor's loss-sharing role is greater when the client is financially distressed than when financially healthy. Therefore, a merger of accounting firms would bring more benefit to financially distressed clients than to financially healthy ones. We measure a client's financial condition using the index proposed by Zmijewski (1984) (*ZFC*). Since the financial conditions of clients with higher *ZFC* measure are worse, the coefficient on *ZFC* ( $b_1$ ) is predicted to be positive.

Furthermore, an auditor's opinion on a client's financial condition is usually articulated in the audit report. Therefore, we also use the type of the audit report (*OPINION*) as a proxy and let it be 1 when the report is unqualified, and 0 otherwise. The expected sign of the coefficient on *OPINION* ( $b_4$ ) is thus negative. However, previous research also suggests a defensive role for timely modified audit report (Carcello and Palmrose 1994). Therefore, a modified report implies a lower compensation to investors in case of corporate failure, which means a positive  $b_4$ . Hence, the sign of  $b_4$  is also indeterminable.

### ***Control Variables***

CL and PW were respectively the fifth- and sixth-largest accounting firms in the U.S.

in 1996 and 1997. The audit fees earned by them in 1996 (1997) were about 2,100 millions and 2,000 millions (2,500 millions and 2,300 millions) correspondingly. Since CL and PW did not differ much in size before the merger, we suppose that there is no significant difference between the effects of the merger on the two firms' audit quality or loss-sharing ability. Hence, *ceteris paribus*, the benefit of the merger, if any, to each firm's clients should be similar. However, to control for the possibility of systematic difference between CL clients and PW clients, we include a dummy variable (*AUDITOR*), which equals 1 for PW clients and 0 for CL clients, in the regression with no prior expectation on the sign of its coefficient.

## EMPIRICAL RESULTS

### Descriptive Statistics

Table 1 provides descriptive statistics about the sample. Except for *CAR* (0,0), the average cumulative abnormal returns of all symmetric window periods around the announcement are slightly positive. 83.77% of the clients receive an unqualified opinion from their pre-merger accounting firms. The numbers of clients that are included in our sample are almost equal for the two pre-merger firms (50.93% for CL and 49.07% for PW). The correlation matrix of the independent variables is shown in Panel B. The highest magnitude of correlation is only 0.1838 in absolute value.

[Insert Table 1 here.]

Table 2 shows the cumulative abnormal returns around the announcement of the merger plan for the clients of the combined firm and the clients of each pre-merger firm only. The result indicates that there is no significant abnormal return when either all

clients' returns, PW clients' returns, or CL clients' returns are formed as a single portfolio. In addition, there is no significant difference between the stock price reactions of PW clients and CL clients.

[Insert Table 2 here.]

Table 3 and table 4 respectively present the CAR results with clients categorized by their rates of growth in sales and financial conditions. In table 3, we define the rapidly growing clients (slowly growing clients) as those with *GROWTH* in the top 25% (bottom 25%) of all clients. In table 4, the financially distressed clients (financially healthy clients) are defined as clients with *ZFC* greater than 50% (less than 50%). This is the definition used by Baber et al. (1995). Table 3 shows that although the rapidly growing clients experience higher abnormal returns than slowly growing clients in all window periods, which is consistent with the expectation of the monitoring hypothesis, the differences are not significant. However, when we classify the clients according to their financial conditions as in table 4, we find that the cumulative abnormal returns are significantly positive for financially distressed clients for window periods (-1, 1), (-2, 2), and (-3, 3). None of the cumulative abnormal returns is significant for financially healthy clients. Furthermore, the differences of the cumulative abnormal returns between the financially healthy clients and financially distressed ones are significant for (-1, 1) and (-2, 2). Up to now, the evidence supports the prediction of the insurance hypothesis but not the monitoring hypothesis.

[Insert Tables 3 and 4 here.]

## **Multivariate Analysis of Cumulative Abnormal Returns**

Table 5 presents the cross-sectional regressions in which cumulative abnormal returns for windows (-1, 1), (-2, 2) and (-3, 3) are regressed on proxy variables for monitoring demand and insurance demand. We can see that variables other than *ZFC* are not statistically significant and the significance of *ZFC* is unaffected by the window period adopted. The results still hold if we include dummy variables for industries of the clients. Overall, the results support the insurance hypothesis that financially distressed clients benefit more from the merger of their accounting firms, which increases the funds available to recover the investors' losses when a corporate failure occurs.

[Insert Table 5 here.]

## **CONCLUSIONS**

The purpose of this paper is to investigate the audit clients' stock price reaction to the announcement of the merger plan of CL and PW in 1997. We contribute to the extant literature in two ways. First, prior literature on the merger of accounting firms mainly focuses on its effect on market competition by examining the levels of auditor concentration before and after the merger. In contrast, this paper investigates the influence of the merger by examining clients' stock price reactions to the disclosure of the merger plan. If the capital market is efficient, stock price change will be a timely and complete measure of the impact of the merger. Secondly, previous research on audit clients' market reaction usually uses negative information as a research target. This paper extends our understanding of the impact of an auditor-related event on the auditees to the case of positive information.

The results indicate that the cumulative abnormal returns are significantly related to the clients' financial conditions but not the clients' rates of growth in sales. That is, the rapidly growing clients and slowly growing clients do not react differently to the announcement of the merger plan. On the other hand, the weaker the clients' financial conditions, the greater the cumulative abnormal return. The results imply that the benefits of the merger do not vary across the clients with different monitoring demand. But the clients with higher insurance demand will benefit more from the merger of their accounting firms.

Overall, the findings provide evidence that the merger of two Big 8 accounting firms may increase the value of an auditee due to the enhancement of the insurance role of an audit, especially when the auditee's financial condition is unsound. However, the value of an audit relating to its monitoring function does not change much from the merger of the two Big 8 accounting firms. The rationale behind the latter findings may be attributed to the observation that, since both accounting firms belong to Big 8 group, the levels of audit quality offered by them are already high enough to meet the need of their clients even without the merger. The incremental audit quality resulting from the merger cannot benefit the clients in a significant way.

On the other hand, Chaney and Philipich (2002) find clients of Andersen's Houston office suffer a more severe decline in abnormal returns than clients of Andersen's non-Houston offices on the days following Andersen's confession that a significant number of documents related to the Enron audit have been shredded. Their result implies that investors do not view the audit quality of different offices of an accounting firm homogeneous. Therefore, if the merger of two accounting firms does not alter in any way

the operation of a local office of the pre-merger firm, the merger would not necessarily enhance the local office's audit quality. Hence, the merger of accounting firms does not necessarily increase the investors' evaluation on the audit quality and the clients' stock price will not change as a result. To investigate the causes of the insignificance of the variable standing for clients' monitoring demand in the case of a merger of two Big 8 accounting firms, future research can thus be directed to study whether the marginal increase in audit value due to a further increase in audit quality is minimal or whether the merger just amounts to mere form without substance and any local office will have the same audit quality whether the accounting firm is merged or not.

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**TABLE 1**  
**Descriptive Data**

**Panel A: Statistics**

	<u>Mean</u>	<u>Median</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Std. Dev.</u>
<i>CAR</i> (0, 0)	-0.0002	-0.0017	0.2507	-0.2220	0.0338
<i>CAR</i> (-1, 1)	0.0001	-0.0038	0.8816	-0.2247	0.0591
<i>CAR</i> (-2, 2)	0.0004	-0.0038	1.1668	-0.6326	0.0823
<i>CAR</i> (-3, 3)	0.0037	-0.0043	1.9476	-0.5599	0.1091
<i>CAR</i> (-4, 4)	0.0035	-0.0030	2.5221	-0.5507	0.1252
<i>CAR</i> (-5, 5)	0.0098	0.0007	3.5089	-0.5290	0.1566
<i>ZFC</i>	0.0171	0.0000	1.0000	0.0000	0.1025
<i>SIZE</i>	5.4316	5.4643	11.8981	-3.4738	2.2662
<i>GROWTH</i>	0.3889	0.0947	106.2429	-0.9169	3.8340
<i>OPINION</i>	0.8377	1.0000	1.0000	0.0000	0.3690
<i>AUDITOR</i>	0.4907	0.0000	1.0000	0.0000	0.5002

**Panel B: Correlations**

	<u><i>ZFC</i></u>	<u><i>SIZE</i></u>	<u><i>GROWTH</i></u>	<u><i>OPINION</i></u>
<i>SIZE</i>	-0.1489***			
<i>GROWTH</i>	0.0094	-0.1838***		
<i>OPINION</i>	-0.0842**	-0.0184	-0.0840**	
<i>AUDITOR</i>	-0.0694**	0.1015***	-0.0462	0.0019

\* Significant at the 10% level, using a two-tail test.

\*\* Significant at the 5% level, using a two-tail test.

\*\*\* Significant at the 1% level, using a two-tail test.

*ZFC* = The probability of financial distress, computed as in Zmijewski (1984);

*SIZE* = the natural logarithm of net sales;

*GROWTH* = the rate of growth in sales;

*OPINION* = a dummy variable, which equals 1 if the audit opinion is unqualified, and 0 otherwise;  
and

*AUDITOR* = a dummy variable, which equals 1 if the pre-merger auditor is PW, and 0 if CL.

**TABLE 2****Univariate Results: Clients Categorized by Their Pre-merger Auditor**

	(0, 0)	(-1, 1)	(-2, 2)	(-3, 3)	(-4, 4)	(-5, 5)
<b>All Clients (n = 807)</b>						
CAR	-0.0002	0.0001	0.0004	0.0037	0.0035	0.0098
Wald-test (Chi-square)	0.0004	0.0000	0.0005	0.0288	0.0207	0.1305
<b>PW Clients (n = 405)</b>						
CAR	0.0009	0.0003	-0.0015	0.0007	-0.0028	0.0012
Wald-test (Chi-square)	0.0486	0.0019	0.0287	0.0042	0.0557	0.0089
<b>CL Clients (n = 402)</b>						
CAR	-0.0012	-0.0001	0.0023	0.0067	0.0099	0.0184
Wald-test (Chi-square)	0.0064	0.0000	0.0047	0.0281	0.0476	0.1355
<b>PW vs. CL Clients</b>						
Difference	0.0020	0.0004	-0.0038	-0.0060	-0.0126	-0.0172
Wald-test (Chi-square)	0.0176	0.0002	0.0120	0.0213	0.0732	0.1106

**TABLE 3****Univariate Results: Clients Categorized by Rates of Growth in Sales <sup>a</sup>**

	(0, 0)	(-1, 1)	(-2, 2)	(-3, 3)	(-4, 4)	(-5, 5)
<b>Slowly Growing Clients (n = 202)</b>						
CAR	0.0014	-0.0008	-0.0022	-0.0094	-0.0079	0.0014
Wald-test (Chi-square)	0.1128	0.0124	0.0522	0.6735	0.3674	0.0090
<b>Rapidly Growing Clients (n = 202)</b>						
CAR	0.0017	0.0012	0.0063	0.0110	0.0109	0.0178
Wald-test (Chi-square)	0.1162	0.0169	0.3009	0.6464	0.4849	1.0651
<b>Slowly Growing vs. Rapidly Growing Clients</b>						
Difference	-0.0003	-0.0020	-0.0086	-0.0205	-0.0188	-0.0164
Wald-test (Chi-square)	0.0020	0.0293	0.3213	1.3075	0.8520	0.5317

a: Rapidly growing clients (slowly growing clients) are defined as those with rates of growth in sales in the top 25% (bottom 25%) of all clients.

**TABLE 4****Univariate Results: Clients Categorized by Their Financial Conditions <sup>a</sup>**

	(0, 0)	(-1, 1)	(-2, 2)	(-3, 3)	(-4, 4)	(-5, 5)
<b>Financially Healthy Clients (n = 774)</b>						
CAR	0.0002	-0.0004	-0.0005	0.0031	0.0031	0.0096
Wald-test (Chi-square)	0.0005	0.0008	0.0007	0.0194	0.0147	0.1169
<b>Financially Distressed Clients (n = 10)</b>						
CAR	-0.0031	0.0487*	0.0994***	0.0707*	0.0384	0.0459
Wald-test (Chi-square)	0.0269	2.2074	5.4305	1.9589	0.4465	0.5202
<b>Financially Healthy vs. Financially Distressed Clients</b>						
Difference	0.0033	-0.0491*	-0.0998**	-0.0676	-0.0353	-0.0363
Wald-test (Chi-square)	0.0253	1.8797	4.5913	1.4991	0.3165	0.2725

\* Significant at the 10% level, using a one-tail test.  
 \*\* Significant at the 5% level, using a one-tail test.  
 \*\*\* Significant at the 1% level, using a one-tail test.

a: Financially distressed clients (financially healthy clients) are defined as clients with *ZFC* greater than 50% (less than 50%).

**TABLE 5**  
**Multivariate Regression Results**

$$CAR = b_0 + b_1 ZFC + b_2 SIZE + b_3 GROWTH + b_4 OPINION + b_5 AUDITOR + u$$

Variable	<u>CAR (-1, 1)</u>		<u>CAR (-2, 2)</u>		<u>CAR (-3, 3)</u>	
	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
Intercept	-0.0038	-0.4659	-0.0023	-0.2071	-0.0013	-0.0878
<i>ZFC</i>	0.0662***	3.0134	0.0988***	3.2665	0.1160***	2.8599
<i>SIZE</i>	0.0007	0.7202	0.0007	0.5356	0.0015	0.8048
<i>GROWTH</i>	-0.0002	-0.3313	-0.0002	-0.2894	-0.0004	-0.3362
<i>OPINION</i>	-0.0016	-0.2640	-0.0019	-0.2349	-0.0016	-0.1484
<i>AUDITOR</i>	-0.0001	-0.0116	-0.0028	-0.4682	-0.0069	-0.8680
F-statistic	1.9350		2.2984		1.9350	
Prob (F-statistic)	0.0863		0.0435		0.0863	

\*\*\* Significant at 1% level, using a two-tail test.

*ZFC* = The probability of financial distress, computed as in Zmijewski (1984);

*SIZE* = the natural logarithm of net sales;

*GROWTH* = the rate of growth in sales;

*OPINION* = a dummy variable, which equals 1 if the audit opinion is unqualified, and 0 otherwise; and

*AUDITOR* = a dummy variable, which equals 1 if the pre-merger auditor is PW, and 0 if CL.