

The Impact Of CEO Turnover On Security Analysts' Forecast Accuracy

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Abstract

This paper reports the results of a study on the impact of CEO turnover on the accuracy of financial analysts' earnings forecasts. Using Value Line's earnings forecasts and a control sample design, the study reveals marginally more accurate earnings forecasts for CEO change firms after CEO turnover. This result may be attributed to the publicity surrounding the CEO replacements.

Introduction

Several empirical studies have documented that firms experiencing poor performance, often respond by top management replacements (Gilson, 1989; John, Lang, and Netter, 1992). This empirical finding is consistent with the common assumption in the strategy and management literature that the change in the top management of an organization would affect its performance (Mintzberg, 1973, Weiner, 1978). Given that top management changes are significant events, it is conceivable that they interrupt the time series of earnings and should increase the challenge of forecasting. Indeed Collins and Hopwood (1980) and Beaver (1981) have asserted that "atypical" events (i.e., potential intervention in the earnings process) can affect the forecasting of earnings numbers.

However, no empirical study has examined the impact of top management changes

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on the accuracy of financial analysts' earnings forecasts. Motivated by recent highly publicized chief executive officer (CEO) dismissals at well-known companies such as General Motors, Kodak, IBM and American Express (see Steward, 1993, for more detail), this paper will examine whether top management turnover will affect the accuracy of financial analysts' earnings forecasts.

Analyzing the accuracy of earnings forecasts developed by financial analysts is of interest for a number of reasons. One is that analysts' forecasts influence market expectations and share prices as reported by Givoly and Lakonishok (1979). Another is that the accuracy of these forecasts may have implications for accounting disclosure policy as discussed in Crichfield, Dyckman, and Lakonishok (1978). The accuracy of analysts' forecasts is also important to researchers who use analysts' forecasts as benchmarks when evaluating earnings announcements and other events (see e.g., Lang

and Litzenberger, 1989).

Background and Hypothesis

Previous research including Brown, Griffin, Hagerman, and Zmijeski (1987), suggests that analysts' forecasts are more accurate than forecasts based on time series (of earnings) models. This empirical finding is consistent with the information integration hypothesis in the forecasting literature (see e.g., Bunn and Wright, 1991). The implication of this hypothesis is that financial analysts might do better than statistical forecasting techniques because they might be able to integrate outside (i.e., non-time series) information into the forecasting process. Often this information can indicate that the time series pattern is changing.

Researchers have also examined reasons for forecast errors by security analysts. Key research in this area includes a study by Elton, Gruber, and Gultekin (1984) that found that the major determinant of forecast error was the inability to forecast the future situation of the specific firm rather than that of the economy or industry. CEO turnover could affect earnings predictability for at least two reasons. One reason is that CEO changes may cause operational ("real") changes in the earnings stream. Another reason is that CEO changes may lead to accounting ("cosmetic") changes.

Denis and Denis (1995) provide empirical evidence that forced resignations will result in significant corporate downsizing (i.e., declines in employment, capital expenditures, and total assets) while normal retirements are followed by little or no changes in operations. In regard to accounting changes, Elliot and Shaw (1988) suggest that the association between executive succession and accounting changes (i.e., changes in accounting principles, changes in accounting estimates, and asset write-downs) may be attributed to new managements' attempt to alter the perception of those evaluating the incumbent managers. Pourciau (1993) and Mur-

phy and Zimmerman (1993) provide empirical evidence that incoming CEOs depress earnings initially to blame prior management for poor performance and to contribute to the appearance of a subsequent turnaround.

Gonedes and Dopuch (1988), on the other hand, argue that an observed association between executive succession and accounting changes may simply reflect the different tastes, perspectives, or different view of the world by the new management. Nonetheless, to the extent the announcement of CEO change calls attention to the announcing firm ("Attention Directing Hypothesis"), it may result in reassessment of future performance by market analysts. Accordingly, this paper will test the following (null) hypothesis:

HO: CEO turnover does not affect earnings predictability.

Research Design

The basic strategy in this research is to compare (same year) earnings predictability before and after the change in top management. However, the selection of appropriate research design is influenced by the factors that can offer alternative explanations. For example, Lys and Soo (1995) report that analyst forecast accuracy improves throughout the year. Hence, to avoid erroneously attributing improved earnings predictability to CEO turnover, when in fact, "non change" firms experienced identical alterations in earnings predictability over the same time period, a matched sample of "non change" firms (control group) is employed. The matching was done on industry and size (sales). The full factorial design will enable us to test the time horizon main effect, the firm type main effect, and the interaction (between time horizon and firm type) effect.

Sample Selection and Data Description

We conducted a keyword search of the

Compact Disclosure database. This search identified 489 companies which disclosed, in SEC filings or annual reports, information regarding a top executive (CEO, chairman, or president) retiring, resigning, or being dismissed over the 1991-1994 period. We then eliminated 377 financial institutions, regulated companies, foreign companies, and bankrupt companies. Of the remaining 112 companies, only 46 were followed by the Value Line Investment Survey (Survey). We also identified a control sample of 46 "non change" companies using Value Line's industry groupings.

The Survey was the source of both actual (A) and forecast (F) earnings per share. All Value Line-tracked firms appear in the Survey's Ratings and Report section quarterly. The Ratings and Reports issued immediately before and immediately following the CEO change announcement date provide the preevent and the post-event (same year) earnings fore-cast data.

Forecast accuracy is defined by the absolute percentage forecast error, or

$$APE_{it} = \left| \frac{F_{it} - A_{it}}{A_{it}} \right| * 100$$

where:

APE_{it} = absolute percentage forecast error for company i during period t

F_{it} = forecasted earnings for company i during period t, and

A_{it} = actual earnings for company i during period t

This error metric has been widely used in accounting research (e.g., Collins et al., 1984).

Results

Table 1 presents a complete summary of means and standard deviations of forecast errors for all companies included in this study. The data contained in Table 1 seem to suggest that forecast errors decrease over time for both CEO change group and the control group. It also shows that mean forecast error is higher for CEO change group than the control group in both preevent and postevent periods. Univariate test results (not reported) strongly confirm these observations.

Table 1
Descriptive Statistics of Forecast Errors

	<u>CEO Change Group</u>		<u>Control Group</u>	
	(n = 46)		(n = 46)	
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>
APE* (before)	101	145	23	54
APE* (after)	64	77	14	27

* APE = Absolute percentage forecast error

The Repeated Measures ANOVA procedures of SPSS were employed to test the time horizon main effect (i.e., forecast accuracy increases over time), the firm type main effect (i.e., forecast accuracy is higher for control firms than CEO change firms), and most importantly the interaction effect (i.e., forecast accuracy improvements are higher for CEO change firms than the control firms).

Table 2 provides the results of the ANOVA analysis. Consistent with prior research the time horizon main effect is strongly supported (Lys and Soo, 1995). The firm type main effect is also highly significant. To the extent the CEO change is a response to poor performance (Khorana, 1996), this result is also expected. That is poor performance may be associated with poor investor demand and hence low analyst following, which in turn may cause lower fore-

cast accuracy (Lys and Soo, 1995). The interaction effect is marginally significant. It indicates that the forecast precision has improved more for CEO change firms than for control firms. To the extent CEO change is a signal of strategic change (Boeker, 1997) and improved future performance, it may attract the attention of analysts who may decide to spend more time/resources on researching the firm; hence relatively more accurate forecasts.


we included all CEO changes in our sample. However, smooth transitions (retirements or voluntary resignations) are usually anticipated events and rarely involve major impact on reported earnings. On the other hand abrupt changes (forced resignations or dismissals) are a surprise and often involve significant shocks to earnings. Future researchers should try innovative strategies (e.g. direct company contact) to separate voluntary from forced CEO departures. 

Table 2
Results of 2 x 2 Repeated Measures ANOVA of Analysts' Earnings Forecast Errors Before and After CEO Turnover

Source	DF	F Value	PR > F
Horizon(a)	1	7.81	.006
Type(b)	1	15.40	.000
Horizon x Type	1	3.05	.084
Error	90		

(a) Horizon = Time Horizon (before and after CEO change)

(b) Type = Firm Type (CEO change group and control group)

Conclusions

This study compares earnings predictability before and after the change in top management. The analysis of sample data shows that both CEO change group and the control group exhibited significantly more forecast precision in the postevent period. However, the gain in forecast accuracy is marginally higher for the CEO change group. This result is attributed to the publicity that surrounds top management turnover. That is the announcement of CEO change may attract the attention of market analysts that will result in more accurate forecasts.

Suggestions for Future Research

The weak results reported in this paper could be the result of our sampling procedure. Using publicly available sources (e.g. *Wall Street Journal*) we could not distinguish between voluntary vs. forced CEO departures. As such

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