# THE IMPACT OF STRATEGIC ALLIANCES ON ANALYSTS' FORECASTS

*Praveen Sinha, College of Business Administration, California State University, Long Beach, CA 90840, (562)985-7695, dr.sinha@csulb.edu*

## SUMMARY & INTRODUCTION

Strategic alliance has often been argued as a more flexible means to achieving some of the same benefits as mergers and acquisitions. Though the empirical studies have examined the market response to both the mergers & acquisitions and the strategic alliances, not many studies have attempted to understand how the market participants decipher the information that is released in these announcements. In the case of mergers and acquisitions, some studies document that earnings predictability deteriorates after merger, whereas other studies show that this deterioration is merger-specific. However, in the case of strategic alliances, we do not have any studies that document how financial analysts incorporate the information in the strategic alliances in their earnings forecasts, and if the earnings predictability improves or deteriorates after the strategic alliance.

The study compares the financial analysts' forecasts of earnings before and after the strategic alliance to assess the impact of SA on the overall earnings predictability. We control for firm-size, firm-industry, type of strategic alliance, prior alliance experience with the same or other firms, analyst following and the overall uncertainty faced by the analysts to examine the impact of the alliance on earnings forecasts and the variance of analysts' forecasts. I find that the financial analysts forecast errors are explained by nature of alliance, analysts following and extent of disagreement amongst analysts. However, these variables fail to explain the change after two years. Similar results hold for dispersion in analysts' forecasts. Collectively the findings suggest that strategic alliances create forecasting problems for up to one year after the strategic alliance and not beyond.

## MOTIVATION

The purpose of this study is to examine the impact of strategic alliances (henceforth SA) on analysts' ability to forecast earnings. It is important for managers to understand these effects because the future level and variance of earnings of a firm impacts its stock price and cost of capital. If the ability to forecast future earnings deteriorates (improves) significantly after the SA, then this cost (benefit) should be considered by the management in evaluating the SA decision. The issue of examining earnings predictability is an important one in other ways as well. Investors and financial analysts alike, focus on forecast of firms' earnings to make investment decisions, and in generating buy/sell/hold recommendations for the stock. If SA affect earnings forecasts, then understanding this effect will improve these decisions.

To the best of our knowledge, no prior study has examined the impact of SA on earnings predictability. However, prior related research on the impact of mergers and acquisitions on analyst forecast accuracy documents that the predictive accuracy subsequent to mergers deteriorates (Haw, Jung and Ruland 1994). The study also finds that the forecast accuracy returns to the pre-merger levels, on average, three years after the merger. However, it is not clear if this result should hold across SA, for all types of mergers or SA. In this section, we develop propositions in which we characterize conditions under which we would

expect a decrease in the accuracy of on earnings forecasts and conditions under which we can expect an increase in their accuracy. Our main focus is on the implications of SA on the transparency of the future profitability of the firm. There are several arguments that suggest that earnings forecasting accuracy will diminish after SA. For instance, SA interrupts the time series of old earnings, and the underlying forecasting assumptions. Because most analysts follow a specific industry, SA across industries may make earnings more difficult to understand, decipher, and forecast by analysts who followed only of the two industries. These arguments suggest that analysts will have difficulty in forecasting earnings subsequent to SA. Should all SA result in diminished forecasting accuracy? We argue that this depends, to a large extent, on the nature of the alliance. Some of the arguments previously raised do not apply in all alliances. For instance, the firm could grow significantly in size after the SA. Because larger firms, in general, are subject to more scrutiny by the press and the financial community, there could be an increase in the amount of information available to the analysts. This increased media coverage can result in enhanced ability to forecast earnings. Usually, larger firms also have higher analyst following. Therefore, after SA, we can also expect an increase in the number of analysts following the firm, resulting in an aggregate forecast that is relatively free of idiosyncratic error associated with individual analysts. Furthermore, if the two firms were in the same industry, we would expect the analysts to have better understanding of the profits generated by the alliance than when the SA involves firms in two different industries. These arguments suggest that SA within the same industry coupled with an increase in available information and analyst following, keeping other factors constant, should result in an increased precision of firms' consensus earnings forecast.

This study examines the predictive accuracy of analysts' consensus earnings forecasts for those firms that engage in ITR&D alliance from 1987 to 1994. The predictive accuracy is measured as the absolute value of the difference in analysts' most recent consensus forecast of annual earnings and the realized annual earnings, appropriately scaled. The predictive accuracy is compared before and after the SA to examine the effect of SA on future earnings predictability. The earnings predictability is said to deteriorate (improve) if the analyst consensus forecast error increases (decreases) after the merger. We examine the characteristics of the firms engaging in the strategic alliance to make an assessment of the impact of the alliance on the accuracy of the consensus analysts' forecast.

## STRATEGIC ALLIANCES AND EARNINGS PREDICTABILITY

The study tests for the following hypotheses:

**Hypothesis 1:** Earnings predictability will **decrease** subsequent to SA.

**Hypothesis 2:** Earnings predictability will **decrease** by a larger amount subsequent to SA in which the two firms are *from different industries* relative to SA from the *same industries*.

**Hypothesis 3:** After the SA, **e**arnings predictability will improve over time.

**Hypothesis 4:** After the SA, earnings predictability will improve faster for two firms that had prior history of successful SA relative to those firms that never had a SA.

# DATA AND SAMPLE

Firm-specific data used in the study comes from Industrial COMPUSTAT and analysts' forecast data comes from I/B/E/S. Data on Strategic alliance is obtained from SDI Platinum.

**Variable Definition:**

For each firm in the sample, we constructed the following variables one year prior to the SA, and up to two years after the SA to test the proposed hypotheses. The year of SA is not considered for analysis.

1. **_APFE$_i$_:** *Absolute Percentage Forecast Error* of firm i in any year, is defined as absolute value of the most recent consensus forecast of earnings minus the actual earnings divided by the absolute value of the actual earnings for the same year.

*APFE$_i$ = |F$_i$-A$_i$|\*100/|A$_i$|*

Where F$_i$ is the most recent consensus forecast of earnings, and A$_i$ is the actual earnings. In instances where A$_i$ was very small, the *APFE*$_i$ values were very large. To avoid distortions due to scaling factor, we set *APFE* equal to 100 in those instances where the *APFE* exceeded 100, as done in the prior literature (Foster 1977).

2. **_STD_VAR$_{it}$_:** Variance of analysts' forecasts of earnings for firm i, in year t divided by stock price per shre.

# EMPIRICAL TESTS

We estimate a regression model to test our hypotheses on the consensus forecast accuracy after the SA. We regress *DAPFE*$_{it}$, the difference in the *Absolute Percentage Forecast Error* after and before the SA, and *STD_VAR* on the following test and control variables.

| | |
|---|---|
| **Firm_All** | **Firm** Prior **All**iance Experience (0,1,2….) |
| **FPA_Exp** | Dummy: **F**irm has **P**rior **A**lliance **EXP**erience (0,1) |
| **Pair_All** | **Pair** Firms' Prior **All**iance Experience (0,1,2….) |
| **PPA_Exp** | Dummy: **P**air Firms have **P**rior **A**lliance **EXP**erience (0,1) |
| **N_Act** | Number of distinct categories in Alliance (1,2,3) |
| **MV** | Market Value of the Firm at the end of the year of Alliance |
| **All_In_Type** | Inter or Intra Industry Alliance (1=Inter; 0=Intra) |
| **Alliance** | Alliance Type (Marketing, Technology,….) |
| **AFE** | Absolute Forecast Error |
| **APFE** | Absolute % Forecast Error (deflated by year end closing prices) |
| **STD_VAR** | Variance of Analysts Forecasts/Price |
| **Rel_MV** | MV/p_MV (LT 1 => Alliance with a larger firm) |
| **num0** | Number of Analysts Following the Firm in year 0 (Alliance Year) |
| **p_num** | Number of Analysts Following the Paired Firm in year 0 (Alliance Year) |

# REFERENCES

Available upon request.