EDITORIAL COMMENTARY

Stock Analysts: Experts on Whose Behalf?

Q: Why didn't Wall Street realize that Enron was a fraud? A: Because Wall Street relies on stock analysts. These are people who do research on companies and then, no matter what they find, even if the company has burned to the ground, enthusiastically recommend that investors buy the stock.

-Dave Barry, Humor Columnist

Investors rely on the opinions of experts to help us pick stocks. Whether one buys stocks through a 401(k) plan, or manage the mutual fund for individuals investing in the 401(k) the decision maker utilizes expert opinion. Those experts are supposed to be stock analysts. Recent scandals like Enron have caused these analysts to be much maligned. We will examine the role of those analysts, their motivations and the amount of useful information they provide.

Buy and Sell Recommendations

Recently analyst recommendations have been subject to much scrutiny. Each analyst issues a rating such as a "strong buy," "buy," "hold," "sell" or "strong sell" recommendation for each stock that they follow. What did each of three leading compilers of earnings estimate data show with their data recently?

Thompson Financial / First Call aggregated these recommendations in July of 2001 and found that almost 50% of all recommendations were "buy" while less than 1% were "sell." A similar study done by Zacks Investment Research of over 8,000 recommendations of stocks in the S&P 500 showed that only 29 were "sell" or less than one-half of one percent. This compared to 214 "strong buy" recommendations.

The third firm I/B/E/S had their data analyzed in a study by Li (2002) over time. It showed startling consistency across seven years and nearly a quarter million recommendations. (See Table 1.)

This pattern cannot appear by chance. Consistently averaging 2% of all recommendations as sells is not because only 2% of all companies followed are worthy of that recommendation. What causes analysts to have such a significant bias in their recommendations?

The Analyst Cycle

To understand analyst recommendations, one must first understand the analyst cycle. This cycle is a description of all the forces that act on analysts in their making a recommendation. The first part is the source of much information to an analyst: company management. Company management provides financial projections about future earnings and provides access to the analyst to members of company management to discuss the firm's prospects. In this part of the relationship, the analyst is a non-paying client of the company.

There is a second part to the relationship between company and analyst. Many analysts work for firms that are investment banks. Investment banks solicit companies for business such as issuing bonds or additional stock for the company. The relationship now may be that the company is the client to the analyst and his firm. Since the analyst works for the firm, he must not get in the way of the investment banking marketing effort and, in fact, may be asked to help in that effort.

The next relationship is that of the analyst to the investor. The analyst provides the investor with information about a security. In return, the analyst needs the investor to trade with the analyst's firm in order for his firm to generate revenues. Many times in a portfolio manager's career, he receives a call from an analyst asking if the portfolio manager values the information that the analyst sends. If the portfolio manager answers yes, the analyst will generally ask for a certain level of trading commissions to flow to his firm. Many analysts are judged based on the amount of trading flow they bring into a firm.

Finally, there is the link back to the company. The investor will act on the information provided by the analyst (along with other information). This will affect the price, which is of great concern to company management. As stock options became more prevalent in the 1990's the concern of senior management turned from earning a large cash bonus to getting lots of stock options and maximizing their value. This causes senior management of a company to be very concerned about what investors think about the company.

Table 1. λ	****
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IBES Rating	Strong Buy	2	3	4	Sell	Total Recommendations
1994	25%	33%	37%	2%	3%	29,521
1995	27	32	36	2	3	30,854
1996	30	33	32	2	2	29,734
1997	31	37	29	1	2	30,350
1998	29	39	30	1	1	35,445
1999	30	40	28	2	1	37,318
2000	31	40	27	1	1	32,663
Average	29%	36%	32%	2%	2%	

Source: Li (2002)

The Analyst Conflict of Interest

Why don't analysts issue sell recommendations? If they did, they may alienate a client of their firm and risk future investment banking business. Or they may simply be cut off from information flow about from a firm. The recent case of AOL/Time Warner is an excellent example of this. According to the published reports (Angwin and Peers, 2001), Merrill Lynch analyst Henry Blodget and Jessica Reif Cohen were not able to communicate with the firm as they had in the past upon downgrading AOL from a buy to a neutral rating. Multiple phone calls were made from Blodget, Cohen and their research assistants, but none were returned. In addition, meeting scheduled between the firm and the analysts were cancelled by AOL. The analysts firmly believe that they were put in the "penalty box" by AOL for making a downgrade recommendation. This belief was based on a phone conversation with the Chief Financial Officer from AOL Time Warner, where he spoke harshly to the analysts and said that he would not answer questions from them. The CFO also acknowledged that he complained to Merrill Lynch's investment bankers about the downgrade.

Another example is when investment banking firms try to utilize analysts as marketers. Lauricella (2001) describes the situation at Bear Sterns where a bank stock analyst received a call from the head of the firm's bond trading desk. The trader wanted the analyst to start covering a small banking stock because it was a potential customer. Analysts claim that they are under heavy pressure to issue favorable ratings of firms that are investment banking or trading customers of the analyst's firm. This pressure can come in the form of phone calls or even direct compensation. Bear Sterns analyst bonuses were based on the analyst's ability to market their stock picks to institutional investors. Firms may even subject an analyst's to scrutiny by instructing them "to seek approval from corporate clients before publishing recommendations on those stocks" This particular quote is attributed to the head of equity research for Europe at J.P. Morgan (Susan Lerner. *cbsmarketwatch.com*, March 21, 2002).

Analysts readily admit that companies will communicate with them much more freely when an analyst has issued a good recommendation on their stock. This type of reward and punishment behavior by companies has a strong effect on analysts. So why do they care so much? The answer is analyst compensation.

Becoming an analyst for a large Wall Street firm is very difficult and prestigious. It is also very lucrative. Institutional Investor All-American analysts routinely take home \$1 million per year in compensation. Superstar analysts like Morgan Stanley internet guru Mary Meeker and Salomon telecom analyst Jack Grubman earned an estimated \$15 million per year. For anyone compensated so handsomely, a major motivating factor in his work must be the maintenance of this wonderful, high paying job. This factor alone can clearly explain why sell recommendations are less then 2%.

This behavior can lead to some rather embarrassing fiascos. During the internet collapse, analysts were still making buy recommendations as the internet stocks were collapsing. More recently, after Enron CEO Ken Lay's announcement on October 16, 2001 that the company would lose \$1.2 billion in shareholder equity, the Prudential Securities analyst for the stock wrote that she was "dismayed" but kept a buy rating on the stock and did not reduce her target price which was \$55. Enron was trading at \$33 at the time. The Lehman Brothers analyst told clients to "rustle up a little courage" and maintained a strong buy rating on the stock. The reason for the strong support of Enron was that it was a huge generator of fees for many investment banking firms in the course of completing 41 merger and acquisition transactions in a period of less then two and a half years. By the spring of 2002, Enron's stock had fallen below \$1.

Analyst Information Flow

In 2000, regulation FD changed the course of information flow. Regulation FD requires companies to release new information in a public manner, not just privately to Wall Street firms. During the tech bubble in 1998 and 1999 a growing phenomenon had been "whisper estimates." Whisper estimates are unofficial forecasts of earnings per share that are used by investors. During the bubble, investors were keen on any whisper numbers they could get. At least three web sites cropped up to supply this almost insatiable need.

Academic studies by Bagnoli, Beneish and Watts (1999) compared whisper estimates collected from web chat rooms to the First Call consensus. They found that the whisper estimates were closer to the reported earnings per share on average and did not have the same understated bias as the First Call consensus. In

light of the evidence that corporations are managing forecasts to small positive surprises, this does not seem like an unreasonable finding.

With the popping of the tech bubble and the onset of Regulation FD, whisper estimates began to fade. According to Edmonston (2001) the number of whisper estimates was reported in news stories in 2001was only one tenth of the number for the year 2000.

Whispers were supposed to be coming from analysts on a frequent basis and sent to their best clients before they were published. When Regulation FD came into effect, it barred companies from selectively disclosing key information to their favorite analyst and for that analyst to selectively disclose information to his/her key clients. This limited the key sources of whispers.

The Changing Nature of Analyst Estimates

Over the years, it has been the job of CFOs of major corporations to tweak the books in order to make earnings appear more stable than they really are. They did this because they believed that investors would reward them for predictability. Then came the internet mania, and CFOs stretched the envelope even further in trying to show good results to investors.

So how do companies smooth out their earnings? Firms that issue credit can report higher earnings by adjusting their default rates on loans to levels that are too low to push up earnings. The default rate can be pushed up later when the company is doing better to bring earnings down. These actions in combination create a smoothed earnings pattern. A company can push a product out to dealers and distributors and book the revenue, even if the merchandise can be returned at a later date. Later when revenues are better, the returns can be booked.

All of the above manipulations can occur within Generally Accepted Accounting Principles (GAAP). These are the numbers created by a firm's auditors and reported to the Securities & Exchange Commission. The 1990's however popularized a new set of earnings numbers, the pro-forma earnings. These numbers are not regulated like GAAP earnings and allow firms to exclude such basic costs as marketing and interest. One famous pro-forma story is a firm who repainted their fleet of vehicles on a regular schedule. After deciding to paint the vehicles before their schedule date, the firm excluded the cost of painting, claiming that since it was not scheduled, it was an extraordinary item, and should therefore not be included as an expense in their proforma earnings numbers.

The problems with pro-forma earnings have led the SEC to issue a warning to companies to stop using pro-forma earnings. Pro-forma earnings "can make it

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hard for investors to compare an issuer's financial information with other reporting periods and with other companies," the SEC wrote. The SEC warned investors to be especially careful when looking at reports that contain alternative calculations of financial results, leave out non-recurring transactions, and vary widely from GAAP results.

Effect of Pro-forma versus GAAP Earnings on the Investor

The current gap between pro-forma and GAAP earnings are the widest in history. In, fact Standard & Poors and First Call both using pro-forma earnings still estimated that earnings fell by 32% versus 17% in 2001 based mainly on how special items were treated. This caused a valuation difference that is significant. In looking at the price/earnings ratio of the S&P 500, it was approximately 36 using GAAP earnings, 24 using S&P earnings and 22 using First Call earnings. Looking at the chart below one can see how clearly the gap has widened between GAAP and pro-forma earnings for the S&P 500.

An exhaustive report on the subject by Keon (2001) looked at the differences. First he found that a key difference was whether the ratio was calculated based on trailing or estimated earnings. Another difference was the way pro-forma earnings were calculated. Reported earnings "could be whatever the company could convince analysts were correct" according to Keon, a former executive at I/B/E/S. He speculates that when the gaps began they were driven by two changes in corporate practices: the merger and acquisition boom and the re-structuring movement. Many companies due to a need to show the results from an acquisition or to deal with poor performance discontinued, sold or cut back on marginal operations, thereby taking a one time charge against earnings. By the 1990s companies like General Motors were taking charges due to accounting of pension liabilities. Since this was no change in the actual liability, companies excluded these charges from earnings. By the late 1990s internet firms had taken this practice to extremes excluding marketing costs, shipping costs and other normal expenses associated with doing business.

Earnings Forecast Quality

How good are earnings forecasts? Much work has been done by academics on the accuracy of estimates. Work by Dreman (1998) suggests errors of up to 41%.

The tenuous nature of forecasts for the next year has not prevented analysts from engaging in five-year forecasts that have become notorious for their poor quality, particularly for technology stocks during the bubble.

It was very typical in late 2001 to see companies with growth rates based on consensus estimates to be negative for the next three years but to have the five year growth rate of earnings at 25% per year higher. Of course these projections were similar to the growth rates projected for those firms in 1998 and 1999 that did not materialize. Merrill Lynch calculated a bottom up five year projected earnings growth rate for the S&P 500 and found it to be 17.4% in early 2001. The compared to a high during the tech bubble of 18.7% and an average since 1980 of 12.8%. The same growth rate calculated for the technology sector was 26.7%. The highest projection during the bubble was 28% and the average since 1980 was 17.3%. This evidence clearly suggests that five year growth rate numbers are not accurate. This could be for a number of reasons. The most likely is that they are not updated very frequently and are much harder to project due to their long term nature. Even small errors in growth per quarter become huge when projected for 20 quarters. With nonexistent earnings, analysts and brokerage houses often turned to five year growth rates to justify stock prices.

Often in 1998-2001, a company would be projected for negative growth during the next three years but 25% growth in years four and five. The positive growth would be pushed further into the future as the projections proved too unrealistic.

Investors who turned to analysts and investment houses were often disappointed with the projections and recommendations on which they based stock purchases. An investor might expect expert advice that is free of both psychological bias and self-interest. Instead they discover belatedly that the advice is a complex mix of wishful thinking and self-serving hype. In many cases, a nonprofessional investor could have attained a better idea of a stocks' value by doing a brief reality check.

Conclusion

Reasonable investment in stocks and other assets is contingent upon a flow of information and an expert analysis of this information that is done on behalf of the investor. If the expert analyst has much more to gain from issuing one type of recommendation than another, the opinion will be biased and inaccurate. Even under the best of conditions when there are no conflicting interests (e.g. companies whose only business is evaluating and rating stocks) there is a great deal of inaccuracy due to the presence of noise or randomness in business.

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Brian Bruce Panagora Asset Management