WHO IS ZACKS?

Zacks Investment Research

Zacks Investment Research was formed in 1978 to compile and analyze brokerage research for both institutional and individual investors. The guiding principle behind our work is the belief that there must be a good reason for the brokerage firms to spend over a billion dollars a year to research stocks to recommend to their clients. Obviously, these investment experts know something special that may be indicative of the future direction of stock prices. We were determined to unlock that secret knowledge and make it available to our clients to help them improve their investment results.

This massive undertaking requires us to continually process reports issued by approximately 3,000 analysts from 150 brokerage firms. At any given point in time, we are monitoring well over 200,000 earnings estimates and brokerage recommendation data points, looking for any change - whether it be an upgrade from a "hold" to a "buy" or a revision in an analyst's forecast for a specific quarter or fiscal year. We constantly compile and update this information, distributing it to institutional investors and many financial web sites. Our ability to gather, analyze, and distribute information on a timely basis makes Zacks' research amongst the most widely used in the industry.

Creation of the Zacks Rank

In the 1970s, Leonard Zacks worked as the head of quantitative research for a major brokerage firm. Holding a PhD in mathematics from MIT, Len created models designed to help investors beat the market. He discovered that:

\[ \text{Earnings estimate revisions are the most powerful force impacting stock prices} \]

This work led to a groundbreaking article, published in the Financial Analysts Journal in 1979 and entitled "EPS Forecasts - Accuracy Is Not Enough." From this seminal work was born the Zacks Performance Rank. This quantitative model uses four factors related to earnings estimates to classify stocks into five groups.
Zacks Investment Management, a wealth management boutique, is an expert on earnings and using earnings estimates in the investment process. The firm is a wholly owned subsidiary of Zacks Investment Research, one of the largest providers of independent research in the U.S.

Zacks is committed to providing comprehensive personalized wealth management solutions to all clients through the use of equity and fixed income strategies. Client portfolios are managed using a combination of Zacks independent research and Zacks quantitative models. Through a personalized investment process, all clients receive the level of customization and personalization that they desire.

THE ZACKS ORGANIZATION

ZACKS INVESTMENT MANAGEMENT:
- Registered Investment Advisor
- Experienced portfolio managers
- Blend of quantitative and qualitative stock selection process
- Fundamental investing based on Earning Estimate Revisions

ZACKS INVESTMENT RESEARCH:
- One of the Largest Independent Research Providers in U.S.
- Has Provided Independent Research to institutional firms such as LPL, UBS, Fidelity, Morgan Stanley, Piper Jaffrey
- One of the “Big 3” in data distribution in U.S.
- Processes and aggregates 6,000 pages of fundamental data on a daily basis
No matter what investment philosophy you adhere to, eventually the movement in a stock’s price can be traced back to earnings. Over the subsequent pages, we will walk you through a series of logical steps in order to show just how powerful a force earnings estimate revisions are on the price action of a stock. More importantly, you will learn how the Zacks Performance Rank is a leading indicator that allows our portfolio managers to get you on board a stock early to enjoy robust gains.

**Who Are Institutional Investors?**

People who trade stocks are broadly defined into one of two groups: institutional investors and individual investors. Institutional investors are the professionals who manage the trillions of dollars invested in mutual funds, pension plans, hedge funds, etc. Individual investors, also referred to as "retail investors," are people who invest their assets independently.

Institutional investors have a considerably greater ability to influence prices than individual investors. The reason is that institutional investors come to the market with millions of dollars to trade and often buy and sell tens of thousands of shares of a single stock over the course of a trading day. This financial muscle has a material impact on the movement and direction of stock prices.

As a boutique wealth manager, Zacks is able to benefit from the power of large institutional investors. In order to do this, it is important to understand what motivates these large firms to buy and sell securities.

**Stock Valuation Models**

Most institutional investors were taught a number of financial models. Many of these models are used to calculate the fair value of a company, and of its shares. Almost without exception, these valuation models focus on earnings generated by these companies historically and into the future. The only way to run these models based upon future earnings is through the use of earnings estimates. On the simplest level, it can be understood that if you raise the earnings estimates used in the model (input), then it will create a higher fair value for the company and its stock (output).

For example, an analyst could determine that a stock is worth a multiple of 20 times next year’s earnings (a P/E of 20). If his current estimate calls for earnings of $1 per share, he would recommend buying the stock for any price below $20 (20 x $1 = $20). If the analyst changes his forecast and believes the company will instead earn $1.10 per share, he would then recommend buying the stock for any price below $22 ($20 x $1.10 = $22). As you can see, an increase in the earnings estimates can translate into a higher price for the stock. Thus, it is imperative to learn more about earnings estimates.

**Where Do Earnings Estimates Come From?**

The most widely used source of earnings estimates comes from brokerage or "sell-side" analysts. The term "sell-side" refers to the fact that these analysts’ employers - brokerage firms, are in the business of trying to get investors to trade stocks. When a broker calls a client, he is trying to use the research produced by his firm’s analysts to "sell" the client on trading a stock, thereby generating a commission.

Brokerage analysts typically specialize in a sector or industry, such as software. They are expected to be objective experts for the industries that they cover. However, their earnings forecasts tend to err in being overly conservative because of the influence of corporate executives and pressure from brokerage firm clients, as is explained below.

**Company Management:** Public companies create financial projections of their future earnings to properly plan for and manage operations. Corporate executives also use these projections to provide a basis to explain to brokerage analysts how they anticipate their company performing in the future. From there, the analysts will layer in some of their own assumptions in order to create an independent earnings estimate (more on brokerage analysts below).
However, it is not in the best interest of corporate executives to share the most optimistic projections with brokerage analysts. A large percentage of executive compensation comes from company stock and stock option plans. Executives realize that if their company reports earnings that are below analysts’ forecasts, almost without exception, the stock price will tumble. This in turn costs them money. Therefore, it is more advantageous for executives to provide brokerage analysts with conservative earnings estimates.

**Brokerage Analysts:** The job of a brokerage analyst is to issue buy, sell, and hold stock recommendations on behalf of their employer. Brokerage firms, in turn, use this research to get clients to buy and sell stocks. To justify their recommendations, analysts usually forecast what companies are expected to earn in the future.

Clients will only act on a brokerage analyst’s recommendation if they think the recommendation will help them make money. The more money a firm’s clients make from a particular analyst’s recommendations, the more valuable the analyst is to the firm. Since analysts issue far more “buy” recommendations than “sell” recommendations, they want to avoid making earnings forecasts that are overly optimistic. The incentive for issuing conservative earnings estimates is that the company has a better chance of reporting earnings that exceed forecasts. In turn, clients will be happy to see the stock’s price rise. Conversely, there is no incentive to issue an earnings forecast that is overly optimistic.

**Consensus Estimates**

For any given stock, there may be from 1 to 40 brokerage analysts following the company and making EPS estimates. For more than 30 years, Zacks Investment Research has been tracking these individual sell-side analyst estimates and creating consensus EPS estimates. The consensus estimate is the average of all the current estimates made available by brokerage analysts. Consensus estimates are more advantageous because they reduce the risk of any single analyst making an incorrect forecast.

\[
\text{Zacks Consensus Estimate} = \text{the average of current EPS estimates}
\]

Zacks calculates a consensus estimate for the current quarter, the next quarter, the current fiscal year, the next fiscal year, and as a long-term growth rate. These consensus estimates are the benchmark by which the company will be judged by the investment community. A company can:

- **Meet** - report the same earnings as forecast
- **Beat** - report better earnings than forecast
- **Miss** - report worse earnings than forecast

Missing a forecast is the most dreaded outcome, since it suggests that a company is not performing as well as investors thought. A stock’s price will often tumble in response to an earnings miss.

**Estimate Revisions**

Although the consensus estimate provides a useful measure by which to gauge a company’s performance, changes to earnings estimates may provide even greater value to investors. Leonard Zacks’ 1979 study proved that the stocks most likely to outperform are the ones whose earnings estimates are being raised. Similarly, the stocks most likely to underperform are the ones whose earnings estimates are being lowered.

Individual and institutional investors both use Zacks Investment Research to find this important information. Every day, Zacks receives research reports from approximately 150 brokerage firms, with many of these firms providing data on a daily or intraday basis. The earnings data and stock recommendations are promptly entered into our database.
Now that you realize the power of earnings estimate revisions, the next logical question is...How do I employ them to invest more successfully?

Well, not all earnings estimates are the same, which is why we created the Zacks Performance Rank. This proprietary quantitative model is based on trends in earnings estimate revisions and EPS surprises and classifies stocks into five groups: #1 Strong Buy, #2 Buy, #3 Hold, #4 Sell, and #5 Strong Sell. Since inception, the Zacks Rank has proven to be a very reliable indicator to predict future movements in stock prices over a 1-3 month time horizon.

The portfolio managers at Zacks Investment Management then take this powerful ranking system and use it as a component of our process when building and managing investment portfolios for private clients such as yourself.

The Zacks Rank is calculated from four primary inputs: Agreement, Magnitude, Upside, and Surprise.

**Agreement:** The extent to which all brokerage analysts are revising their EPS estimates in the same direction. The more analysts that are revising estimates upward, the higher the Zacks Rank.

**Magnitude:** The size of recent changes in the consensus estimate for the current fiscal year and the next fiscal year. For example, an earnings estimate revision that causes the consensus estimate to increase by 6% is a more powerful signal than an earnings estimate revision that causes a 2% rise in the consensus estimate.

**Upside:** Few events can move a stock faster than an earnings surprise. Upside is a proven way to find stocks that are more likely to have a positive earnings surprise at their next quarterly announcement. Upside looks at the difference between the most recent estimates and the consensus estimate. The most recent estimates are those issued by brokerage analysts within the last 30 days. This is often called the "Whisper Number" in the media community. A stock’s Zacks Rank can improve if one or more analysts issue revised earnings estimates that are higher than the current consensus estimate.

**Surprise:** An earnings surprise happens whenever a company reports earnings above or below analysts' estimates (aka Consensus Estimate). A company that reports a positive surprise in the most recent quarter is more likely to have a positive earnings surprise in the next quarter as well (and visa versa). The Zacks Rank calculations factor in the last quarter’s EPS surprise.
Every night we recalculate these four factors for the universe of stocks covered by the brokerage analyst community (approximately 4,400 stocks). The four measures are combined into a composite score, which is then used to assign a Zacks Rank.

Note that the universe of stocks takes on a "bell-shaped" distribution when divided by Zacks Rank. Thus, the #1 stocks are truly the "cream of the crop" since they represent the top 5% of the stock universe experiencing the strongest earnings estimate revisions. As you can see in the charts below, this is much more objective than the average broker recommendation.
HOW THE ZACKS RANK PREDICTS PRICE MOVEMENT

The Zacks Ranks does not influence price movement, it simply alerts us to changes in expectations that may result in price movement. To better understand how the Zacks Rank can identify stocks likely to experience price movements in the next 1-3 months, consider the imaginary company XYZ Corporation.

Step 1: Brokerage Analysts Upwardly Revise Earnings Estimates
Analysts sense positive momentum in XYZ’s business. Perhaps the analysts saw bullish trends in the latest earnings report or perhaps the company’s management was unusually upbeat in a recent meeting. Regardless of the reason, the analysts are convinced that earnings in future quarters are going to be higher than they previously anticipated. As a result, the analysts issue new reports with upwardly revised profit expectations. This new information is sent to institutional investors, individual brokerage clients, and to Zacks.

Step 2: Daily Updating of the Zacks Rank
Every night, the Zacks Rank is recalculated for the entire universe of stocks covered by analysts. A value is assigned to every stock based on the scores of the four factors previously described and a new rank is assigned. This process takes into account the upward revision in XYZ’s earnings expectations and, as a result, XYZ is assigned a #1 Rank.

Step 3: Money Starts Flowing into the Stock
Institutional investors (mutual funds, pension plans, etc.) have the greatest buying power to influence a stock’s price. Most of these institutional investors employ valuation models that use earnings estimates as a prime component. Thus, when they receive new research from the sell-side brokerage analysts stating that EPS estimates are going up for XYZ, their opinion of XYZ improves. (The higher earnings estimate makes the stock appear to be more of a bargain). As result, investors want to purchase more shares of XYZ for their portfolios. However, since they have so much money to spend and do not want to run up the price on themselves, they end up accumulating shares over the coming weeks and months. This gives the portfolio managers at Zacks Investment Management time to sneak in ahead of the large institutions to reap the rewards of the rising share price for you.

Step 4: Momentum & Technical Analysis Investors Buy
There is a vast legion of investors who employ charting and timing models that look for trends like a rising share price and a corresponding increase in daily trading activity to spot winning stocks. In general, they believe that a stock on the rise will continue its ascent over the short-term. Therefore, given the impetus in the stock price and volume from the large institutions in Step 3, these momentum and technical analysis investors may jump on board XYZ for a short-term profit and drive the price even further.

Step 5: Earnings Surprise
Nothing catapults a stock faster than a strong earnings surprise and the Zacks #1 Rank helps to identify those stocks that are most likely to issue a positive earnings surprise. The reason is that two of the four factors used in the Zacks Performance Rank look for stocks with the strongest potential to post a positive earnings surprise (Upside and Surprise). In the case of XYZ, a very bullish earnings report could send the stock’s price even higher.

Step 6: Rinse and Repeat
If indeed XYZ Corporation posted an upside earnings surprise and gave solid guidance for the future, then it is very likely that this positive cycle will start all over again at Step 1.
Perhaps even more important than knowing what stocks to buy is also knowing when it is time to sell a winning position. Too often emotion comes into play and investors "fall in love" with a winning stock.

At Zacks we have a strong sell discipline. Just as the Zacks Rank guides us towards stocks poised to outperform the market, in a similar fashion the model uses negative earnings revisions to tell us when to sell.

**Negative Earnings Revisions**
If earnings estimates are declining, a six step process resulting in potential downward price movement occurs:

1. An analyst senses negative business momentum and lowers his estimates on a stock.

2. A Zacks Rank of #4 or #5 is assigned, alerting Zacks’ portfolio managers that earnings estimates are declining. In response Zacks will likely sell this position from your portfolio.

3. Large institutional investors enter in the new information into their valuation models and view the stock as being less attractive. As a result, they sell their shares.

4. Active traders, who rely on technical analysis, notice the weakness in the price and sell the stock short.

5. The company issues a disappointing earnings report, causing even more investors to sell the stock.

6. If the company provides more bearish information, analysts lower their forecasts, restarting the process again.
Over the years, more and more investors became enthralled with the power of the Zacks Performance Rank to select winning stocks. Why? The philosophy has proven results and it makes sense. However, many investors found it somewhat cumbersome to sort through the daily list of approximately 220 Zacks #1 Rank stocks... Could you blame them? Not many people have the time to perform their due diligence on 10 companies let alone 220. Clearly, there was a need for some guidance to truly harness the power of the Zacks Performance Rank. It was this need that Ben Zacks took upon himself to fulfill.

Who better to interpret the upside of the Zacks Performance Rank than one of its creators. Despite all the positive indicators a company may exhibit with a high Zacks Rank, there is more to the story. Ben’s primary goal was to utilize the objectivity of the Zacks Performance Rank and cross that with his own market expertise. From this, Zacks Investment Management was born.

Ben Zacks, brother of Leonard Zacks, created Zacks Investment Management. At Zacks Investment Management portfolios are created through a customized investment management process that is based on a client’s specific needs and objectives. In 1998, Mitch Zacks joined the firm as the popularity of the Zacks process continued to increase.

By using the Zacks Rank Investment Philosophy, Ben and Mitch create strategies designed to deliver results for you. They take the proprietary models you have just learned about and couple it with fundamental analysis, expert judgment and the assistance of research analysts.
Disclosure

Zacks Investment Management, Inc. is a wholly-owned subsidiary of Zacks Investment Research. Zacks Investment Management is an independent Registered Investment Advisory firm and acts as an investment manager for individuals and institutions. Zacks Investment Research is a provider of earnings data and other financial data to institutions and to individuals. As well, Zacks Investment Research publishes independent equity research with coverage of nearly 1,200 companies. One or more investment advisory accounts for which Zacks acts as investment advisor may own or have sold short securities and/or hold long and/or short positions in options reviewed in any one or all of its publications to include (but not limited to) Zacks.com, ZacksElite.com, Zacks Equity Research. Officers, directors and/or employees of Zacks may own or have sold short securities and/or hold long and/or short positions in options reviewed in these same publications.

The S&P 500 Index ("S&P 500") is a well-known, unmanaged index of the prices of 500 large-company common stocks selected by Standard & Poor's. The S&P 500 includes the reinvestment of all dividends; no transaction costs, and represents the gross returns before management fees. The volatility of the benchmark may be materially different from the individual performance obtained by a specific investor.

Past performance is no guarantee of future results. Inherent in any investment is a risk of loss. Zacks Investment Management began managing money in 1994. Prior to this date, Zacks Investment Management was not managing money. Standard management fees are available on request and are described in Part II of Form ADV. Investments in Zacks' strategies are not deposits of any bank, are not guaranteed by any bank, are not insured by FDIC or any other agency, and involve investment risks, including possible loss of the principal amount invested.
TAKE THE NEXT STEP IN SECURING YOUR FINANCIAL FUTURE

Let us help you leverage the power of the Zacks Investment Philosophy. Contact Zacks today and a seasoned investment consultant will personally guide you through our process.

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