

# THE ANALYTICAL ECONOMIST

## *Taking stock*

As the bull market continues to limp along, complaining about the stock market has become a national pastime. Some corporate executives argue that they are shackled to their quarterly returns; even if the company is sound, low returns may spark a flurry of selling by shareholders. Others grumble that the market undervalues their companies and leaves them vulnerable to takeovers. Investors fret that the market has become so volatile that they are unlikely to make a profit. What purpose does the market serve these days? Is it doing an efficient job?

Long before the New York Stock Exchange was officially established in 1817, merchants traded company stocks (and government bonds) as a means of raising and making money. Investors swapped their money for equity, or ownership, in a company. Companies still look to stock markets for capital, although not as often as they once did. (According to Securities Data Company, companies raised in excess of \$20.7 billion by issuing common stock last year as compared with \$29.9 billion in 1988.)

Economists define a broad role for the stock market: it is a mechanism for allocating a scarce resource, namely, capital. Because investors continually look for a good return on their money, they will move funds out of companies that are faltering and into ones that are well managed. This flexibility sets a price for every company and makes it easier or more difficult for the firm to raise additional funds.

If the market is "efficient," then such prices truly reflect the value of the company. An inefficient market, on the other hand, wastes money by pushing up the stock prices of companies that have lackluster futures. It also cheapens the value of better firms. Unfortunately, there is no consensus among economists about how to determine

whether the market is indeed efficient.

According to the benchmark definition written by Eugene F. Fama of the University of Chicago, an efficient market "correctly uses all available information" to determine the appropriate stock prices. A negligible transaction cost for trading stocks and free access to information are two necessary conditions for an efficient market.

Several changes during the past 15 years have made the market increasingly adept at moving capital around. In 1975 the U.S. abolished a rule that required brokers to charge fixed fees for their services. By freeing brokers to negotiate (and thus lower) their fees, the change has made it cheaper to trade large blocks of stock. Computers have also speeded up trading, bringing more information to investors and enabling them to act quickly on the news. Whereas in the past an investor might have learned that a company lost a bid for a new contract but then decided it was too costly to bother selling that stock, today he might sell his stock immediately, says Gregg A. Jarrell of the University of Rochester.

As a result, proponents of the efficient-market theory say, it may be appropriate for a company's stock to rise or fall dramatically when the market learns something new. When investors learned in late October that after 30 years Texas Instruments had finally won a Japanese patent for the integrated circuit, they pushed up TI's stock by almost 30 percent. "If you have good information, the market sets a fairly precise number on the stock price," Jarrell maintains.

Even the bidding wars that take place during a corporate takeover and send a company's stock skyrocketing can be explained, Jarrell says. He argues that the stock price is elevated by the bidder's plans for reorganizing the company. If such bids fall through, the

stock quickly sinks almost to its original level, he says, because none of the proposed restructuring takes place.

Other economists remain unconvinced that the market responds in such a rational way. Robert J. Shiller of Yale University argues that stock prices are often bid up or down by investors who simply follow a market fad and get carried away.

As evidence of the effects of fads on the market, Shiller points to what he sees as excessive volatility of prices in the market. In theory, investors assess the value of a stock based on a calculation of its "present value." This standard calculation is essentially a summation of the expected dividends from a stock, discounted by an interest rate. (The discount rate acknowledges that inflation and uncertainty make the future dividends less valuable than payments today.) If an investor decides that the present value of a company exceeds the current selling price, he should buy. Moreover, since dividends are somewhat predictable, Shiller argues, changes in trading patterns should be smooth. Instead he sees erratic fluctuations in the data and so believes that the market is not behaving rationally.

Shortly after the Dow Jones Industrial Average plunged 190 points on October 13 of last year, Shiller surveyed about 100 market professionals on what they felt caused them to sell. Some 77 percent thought that the changes in the market that day were more the result of psychology and emotion than of news about a change in stock-market fundamentals.

But the economists do agree on one point: the market is not significantly more volatile now than it has been in the past. A recent study by G. William Schwert of the University of Rochester shows that the percentage changes in the Dow during the 1980's have been unremarkable—except, of course, on October 19, 1987, when the Dow fell more than 20 percent. As a percentage, the more recent October 13 fall did not even rank among the 25 largest drops in the stock market's history, he says. Schwert suggests that press reports about the absolute fall in the Dow (190 points on October 13) have fanned concerns, whereas reporting the drop as a percentage (more than 6 percent) would not have.

The issue of market efficiency is far from resolved. If the stock market is efficient, however, executives who complain that their companies are undervalued should take a long, close look at the way they run their business.

—Elizabeth Corcoran