BY JEFFREY CASDIN

INVESTORS ROTATE OUT OF BIOTECH

Last November we felt that the standoff in investor sentiment concerning which direction the stalled U.S. economy would take—either further decline or incipient recovery—was about to be resolved. We warned then of our concern that, whichever way it swung, the implications for biotech stocks would not be good until the market adjusted itself for the change.

For the better part of last year, as the Federal Reserve pushed interest rates down trying to get the economy unstuck, cash poured into the stock market as yields on interest-bearing securities became increasingly unattractive and stocks were perceived as the best alternative. Investors sought out sectors of the market where growth was most assured, in other words, health care, technology, and small companies. On the market's slot machine, three cherries came up for biotech, as it met all three criteria. Thus biotech stocks became the most intensively purchased equities.

Speculative excess

Signs of the speculative excess that this trend would inevitably cause became unmistakable. The Oppenheimer Biotech Index, which measures the change in value of an equal investment in 100 biotech stocks, was up 250 percent in 1991. Since the rush started a year ago, $4 billion in new primary biotech shares were sold, of which $1.7 billion was invested in initial public offerings (IPOs) by 45 new public biotech companies. Perhaps the best measure of the extent of this unprecedented speculative demand was the ability of nine already public biotech companies to do two secondary offerings in a 12-month period and of an astounding ten IPOs to come back and do a secondary offering within 12 months of their IPO, a feat we have never seen in any other market before.

Given the degree of speculation, it became clear that, if investors decided the economy was going lower, the mattress would start to look like a better haven for cash than stocks—and that all stocks, particularly those up on a major profit spike such as biotech equities, would get creamed. On the other hand, if the economy began to recover (which we believed was the more likely outcome given the overwhelming pessimism regarding recovery), then other groups, most of them beaten down by the recession and debt overhang, would become compellingly attractive on an earnings growth and risk/reward basis.

Our concern was that this shift in sentiment toward recovery, if it occurred, would cause interest rates to stop declining, slowing the flow of new cash into the market. This, in turn, would exacerbate the inevitable siphoning of large amounts of cash out of the few groups that in the old environment performed well, specifically biotech, into the new groups gaining favor. Given the heights that the biotech group had achieved, this outflow of cash would likely cause a sharp correction in the stocks, even in a rising overall market.

Rotation of interest

This latter scenario, which is called a rotation of interest, has clearly been playing out in the market (up) and in biotech stocks (down) since December. The expected correction in biotech has been sharp, with our overall index down 16 percent since its all-time peak in early January. Stocks of the top ten companies in our 100-stock index, comprising more than 50 percent of the index's market capitalization of $33 billion, have fallen over 25 percent on average. The 30 stocks in our second tier, with an aggregate market capitalization of 25 percent of the total, have declined 20 percent. And the 60 stocks in our third tier, comprising the remaining 25 percent of the total market capitalization, have dropped just 14 percent.

This is the type of pattern one would expect in the initial stages of a rotation of interest in a bull market, where large institutional players, who overweight or underweight groups according to economic and market trends, would be

RISKING FDA, COMPETITION

The fundamental risks that have most often surfaced during the rotational decline in biotech stocks coalesce around three issues: FDA, health-care cost containment, and competition. The sense is that FDA has become more stringent in drug approvals, after some recent setbacks for Immune Response (San Diego, CA), U.S. Bioscience (W. Conshohocken, PA), MGI Pharma (Minneapolis, MN), and Centocor (Malvern, PA). Also, the political mood of the country regarding spiraling health-care costs has greatly increased the chances of national health-care cost-containment legislation. These two problems are often seen as one: that FDA deliberately slows approvals to limit expensive new technology and creates simultaneous approvals to foster price competition.

That FDA is the gatekeeper in this business is old news. But neither U.S. Bioscience nor MGI Pharma is a business based on biotechnology, and the products they are putting forth are old chemicals looking for a new life as drugs, so nothing is new here if they fail to make it.

Surviving FDA setbacks

Long before the setback for Immune Response and the perceived setback for Centocor, there were other setbacks in biotech. These included Xoma (Berkeley, CA) with its sepsis monoclonal; Immunex (Seattle, WA) with granulocyte macrophage-colony stimulating factor (later approved); Cetus (Emeryville, CA) with interleukin-2 (later approved); and Genentech (So. San Francisco, CA)—the first to fail—with tissue plasminogen activator (later approved). The group survived after each setback, not just because most of their products were eventually approved, but because all the others also made it through. Genentech's insulin, alpha interferon, human growth hormone, gamma interferon, and Factor VIII made it, as did Biogen's (Cambridge, MA) alpha interferon, Chiron's (Emeryville, CA) hepatitis B vaccine and hepatitis C test, Amgen's (Thousand Oaks, CA) erythropoieten and granulocyte-macrophage colony stimulating factor, Genzyme's (Cambridge, MA) á-glucocerebrosidase, and Centocor's and Cytogen's (Princeton, NJ) radioisotope, *in-vivo* imaging agents. Together, these products generate revenues at the rate of over $3 billion per year. When products to be approved in the next few years are included, revenues should continue to grow at a rate well over 20 percent.

In short, FDA approval is a threat to

the first to act on a change in sentiment toward recovery. And because big institutions need to raise large amounts of cash to make any shift in sentiment meaningful, they would sell their large-cap stocks in a group first. However, sector funds that specialize in biotech and health care have no place to rotate to. Moreover, individual investors typically do not react quickly to this kind of swing. These biotech funds and individuals are the holders of the smaller stocks in the group, and their behavior, in our opinion, is reflected in the relatively better performance of the smaller stocks.

We would expect to see the performance disparity narrow between smaller-capitalization and larger-capitalization stocks as the rotation runs its course and the larger-cap stocks begin to find support, while the smaller-cap stocks adjust to new lower valuations relative to the larger ones. We would not be surprised to see the relative performance of the tiers reverse itself during this period, with the decline in the top-tier stocks ultimately less than that of the lower tier, once the lower tier reaches its cyclical trough.

Not a science

Since this is far from a science, it is difficult to predict how much farther this correction has to go. Our hunch is that most of the correction has already occurred in the top tier, with a ways to go in the lower tier. As shown by what happened on the way up, the market generally takes a trend to an extreme before reversing. We believe the nadir will be reached when the market reaches a consensus that the economy is indeed recovering. The rotation will have been completed, having gone to excess. When the overall market corrects itself, biotech stocks will likely be brought somewhat lower as the market tide goes out, creating the bottom for the group.

We do not expect another round of biotech mania for quite a while, even though it may appear that this is happening from time to time. Each stock will respond to its own fundamental progress, although in the often arcane (to investors) world of biotech, it may take a while for the fundamentals to get sorted out, especially with so many new public companies on the scene.

We believe the sector's overall fundamentals are solidly intact. Simply stated, the technology of biotechnology is providing a growing understanding of how biological mechanisms work at a molecular level, giving biological engineers the ability to manipulate these mechanisms with great specificity. With this ability, engineers can design new drugs that are able to treat life-threatening or severely disabling diseases that cannot be treated meaningfully with existing drugs. Given their specificity, the odds of the eventual approval of these drugs by the U.S. Food and Drug Administration (FDA, Bethesda, MD) are substantially higher than those of traditional drugs. And their value, in light of the diseases they treat, is very high.

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every company's product pipeline. But compared to the track record of conventional drugs, FDA-approval success rate of biotech drugs has been a big plus for the biotech group as a whole, and we believe this will continue. While we believe initiatives both inside and outside FDA will streamline the approval process for life-threatening drugs, the growing backlog of biotech applications at the budget-constrained agency will result in no net improvement in time-to-approval period.

Cost containment

Neither cost containment nor competition will stop the fundamental progress of biotech. In fact, an analysis of these risks helps form a powerfully logical argument in favor of the continued positive growth of biotech.

The major cost components of our health-care system are hospitals and doctors, which, by about a two-to-one ratio, together account for about two-thirds of health-care costs. A large percentage of these costs goes toward treating diseases for which there are either no drug therapies or very ineffective therapies, for example, AIDS, cancer, and Alzheimer's disease. If drugs could be designed to treat these diseases safely and effectively, tens of billions of dollars could be saved. That's what biotech promises to do and, we believe, is in the process of doing. If companies are able to command prices commensurate with the savings their drugs provide, the profits earned will spur others to come up with more and better drugs, and the market will pour equity into the industry, creating a highly competitive and productive system to address the high costs of health care.

Just about everything that is best about American business is embodied in biotech. We do not believe, when the moment of truth in health-care legislation arrives, that our politicians will seriously jeopardize this "golden goose," especially in light of what's happened to the U.S. electronics industry.

Intense competition

Yes, there will be increasingly intense competition as biotechnology continues to advance more broadly and deeply and as increasingly fundamental approaches to treating disease are found. But the race will go to the best, brightest, and swiftest. And that means biotech companies first and the established drug companies a distant second.

As drugs take an increasing share of the health-care market, the biotech segment, relative to its base, will be the primary beneficiary. We continue to believe that a handful of established biotech companies still represent the best investment vehicles to moderate the inherent risks of intensifying competition in the group as whole. Simply put, they have the technology base (which drug companies in general lack) and the financial resources to incorporate new technologies, either through internal development or external acquisition. This will allow these more mature biotech companies to remain competitive and, with their increasingly effective marketing forces, drive their products into the market. We do not believe the valuations of these companies (our favorites being Amgen, Chiron, Centocor, Genzyme, and Biogen) have become as excessive as those of the smaller and newer companies over the past year. And with their sharper relative decline of late, we recommend increasingly aggressive accumulation of this top five as the rotational decline in biotech runs its course.

Perhaps the clearest demonstration of this tier's valuation is Amgen's price/earnings (P/E) multiple of 35 times this year's earnings. We estimate that the company has a long-term growth rate of about 35 percent per year. This compares to a P/E ratio of 25 times for the high-growth drug stocks such as Merck (Rahway, NJ), which have long-term growth rates near 20 percent.