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Biotechnology — Then & Now

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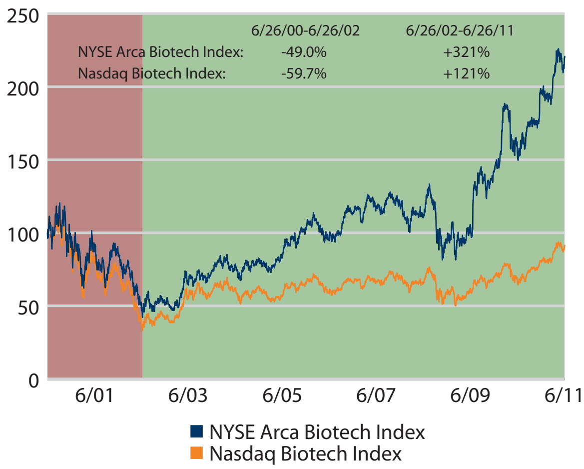
On June 26, 2000, President Clinton and British Prime Minister Tony Blair held a joint news conference to announce the completion of the initial sequencing of the human genome. The announcement was greeted with great enthusiasm as people around the globe imagined the potential that this information held for predicting and treating diseases for which there had previously been little hope.

And yet, despite the enormity of this achievement, investors in the biotechnology industry watched the NYSE Arca Biotechnology Index tumble nearly 50% in the two years following its announcement, as investors learned that the timetable by which scientific knowledge results in marketable products is often quite opaque. As the biotechnology industry evolved, however, innovation led to new FDA-approved medicines that boosted the industry's revenues. As a result, the NYSE Arca Biotechnology Index rallied by over 320% in the next nine years (see chart below).

Chart 1*



*Source: Bloomberg. Because the two indexes have different beginning index values, they are adjusted to a starting level of 100 as of 6/26/00 in order to normalize the subsequent percent changes relative to each other. Past performance is not a guarantee of future results. Performance information for the NYSE Arca Biotechnology Index[SM] is for illustrative purposes only and does not represent actual fund performance. No representation is being made that any investment will achieve performance similar to that shown. Indexes are unmanaged and an investor cannot invest directly in an index.

Today, a more mature biotechnology industry holds great importance for the US, and other nations around the world, in the struggle to control the cost of health care. As the "baby boom" generation begins to exit the workforce, while at the same time entering the most cost-intensive stage of life for health care, the ability to predict, prevent, and treat diseases without the need for surgery and other costly medical procedures is invaluable.

In light of the risks associated with owning individual biotech companies, many investors have turned to ETFs for diversification. Some might be surprised to learn of the wide dispersion of returns among biotechnology ETFs in recent years. For example, over the last 5 years the best performing biotech ETF, the First Trust NYSE Arca Biotechnology Index Fund (FBT), provided an annualized return of 16.4%, while the worst performing biotech ETF provided an annualized return of 6.4%.[1] Not surprisingly, these differences in performance are closely tied to the underlying indexes upon which their respective ETFs are built.

A Tale of Two Indexes

The NASDAQ Biotechnology Index is currently tracked by more than $1.6 billion in ETF assets. It is also one of the benchmark indexes by which the performance of the First Trust NYSE Arca Biotechnology Index Fund (FBT) is measured. Differences in index construction, such as weighting methodology and number of holdings (see Table 1), have resulted in dramatically different results for these two biotechnology indexes over the last several years (see Chart 1).

Table 1

	NASDAQ Biotechnology Index	NYSE Arca Biotechnology Index
Weighting Methodology:	Market-Cap Weight	Equal-Weight
Number of Holdings:	126	20

In considering which approach offers the most attractive opportunity for investors, it is helpful to review underlying factors that contribute to the distinct return profile of biotechnology stocks. In comparison to many other sectors of the economy, the long-term success or failure of a biotech company to deliver profits is especially difficult to predict, since innovation is often produced from uncharted scientific territory. While biotechnology companies bear great expense for research and development, there is no certainty that any given line of inquiry will produce innovation to compensate for that cost. On the other hand, when breakthroughs are made, they can be tremendously profitable. As a result of this uncertainty, a large proportion of many biotech companies' stock returns are clustered around the public release of company-specific information such as trial results or comments from regulators. However, the impact of these announcements is generally limited to the particular companies to which they apply, not the overall industry.

Consequently, investors seeking diversified exposure to the biotechnology industry must also recognize the risk of owning too many stocks, and ultimately diluting the performance contribution of the best companies in the index. This is an important factor in explaining the outperformance of the NYSE Arca Biotech Index (which holds 20 stocks) versus the NASDAQ Biotech Index, (which holds 126 stocks). Of course, a concentrated portfolio also results in greater risk of loss than a more diversified portfolio.

Perhaps the most important contributing factor to the relative outperformance of the NYSE Arca Biotech Index versus the NASDAQ Biotech Index is their respective weighting methodologies. On one hand, the NYSE Arca Biotech Index's equal-weight approach provides an average 5% exposure to each of its constituents, regardless of their market capitalization. On the other hand, the market-cap weighted approach followed by the NASDAQ Biotech Index gives greater weight to large companies, but insignificant weight to small- and mid-sized companies. As a result, although many of the best performing biotech companies were held by both indexes, because they were not generally the largest biotech companies, the NASDAQ Biotech Index did not reap the rewards from their explosive performance to the extent that the NYSE Arca Biotech Index did.

Potential Diversification Benefits of Biotechnology

In light of its unique return profile, the biotechnology industry also has the potential to provide added diversification to an investment portfolio. Over the last 5 years, as the global economy suffered a financial panic, the correlation between many "risky"

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asset classes increased compared to previous years, thereby decreasing the diversification benefits provided by these asset classes. For example, the five year correlation coefficient[2] for the S&P 500 Index and the S&P SmallCap 600 Index increased from 0.81 on 6/30/2006 to 0.92 on 6/30/11. In contrast, the five year correlation coefficient for the NYSE Arca Biotechnology Index and the S&P 500 was 0.65 on 6/30/06, and remained steady at 0.66 on 6/30/11, thereby maintaining the diversification benefit provided by including biotechnology stocks in an investment portfolio (see Correlation Matrix below).

Over the last few decades, the biotechnology industry has evolved from a handful of companies involved in mostly theoretical research, to a much more robust industry that is reaping the fruits of that study. As the pipeline of innovation continues to flow, biotechnology companies may provide answers to some of our most difficult medical questions, and in the process, provide distinctive opportunity for investors.

[1]NAV returns as of 6/30/11.

[2]"Correlation coefficient" is a statistical measurement showing the degree to which two asset classes move together.

5 Year Correlation Matrix (as of 6/30/11)

Security	S&P 500 Index	S&P MidCap 400 Index	S&P SmallCap 600 Index	Barclays Aggregate Bond Index	Dow Jones Commodity Index	Dow Jones REIT Index	MSCI EAFE Index	MSCI Emerging Markets Index	NYSE Arca Biotechnology Index
S&P 500 Index	1.00	0.95	0.92	0.15	0.55	0.81	0.91	0.83	0.66
S&P Midcap 400 Index	0.95	1.00	0.97	0.13	0.56	0.84	0.87	0.82	0.64
S&P SmallCap 600 Index	0.92	0.97	1.00	0.11	0.46	0.87	0.81	0.74	0.66
Barclays Aggregate Bond Index	0.15	0.13	0.11	1.00	0.07	0.29	0.25	0.18	0.12
Dow Jones Commodity Index	0.55	0.56	0.46	0.07	1.00	0.37	0.64	0.68	0.28
Dow Jones REIT Index	0.81	0.84	0.87	0.29	0.37	1.00	0.74	0.62	0.58
MSCI EAFE Index	0.91	0.87	0.81	0.25	0.64	0.74	1.00	0.91	0.60
MSCI Emerging Markets Index	0.83	0.82	0.74	0.18	0.68	0.62	0.91	1.00	0.52
NYSE Arca Biotechnology Index	0.66	0.64	0.66	0.12	0.28	0.58	0.60	0.52	1.00

First Trust NYSE Arca Biotechnology Index Fund Quarter End Performance

	Quarter	YTD	1 Yr.	3 Yr.	5 Yr.	10 Yr.	Since Fund Inception
Fund Performance[1]							
NAV	6.43%	12.21%	41.92%	24.81%	16.37%	N/A	17.16%
After Tax Held	6.43%	12.21%	41.92%	24.81%	16.27%	N/A	17.07%
After Tax Sold	4.18%	7.94%	27.25%	21.70%	14.38%	N/A	15.10%
Market Price	6.43%	12.20%	42.01%	24.85%	16.37%	N/A	17.18%
Index Performance							
NYSE Arca Biotechnology Index[SM2]	6.63%	12.56%	42.77%	25.57%	17.08%	9.09%	17.89%
NASDAQ Biotech Index	6.53%	14.34%	39.79%	12.29%	8.71%	1.08%	9.37%
S&P Composite 1500 Health Care Index	7.26%	14.19%	29.54%	8.08%	5.78%	3.40%	5.95%
S&P 500 Index	0.10%	6.02%	30.69%	3.34%	2.94%	2.72%	3.43%

Performance data quoted represents past performance. Past performance is not a guarantee of future results and current performance may be higher or lower than performance quoted. Investment returns and principal value will fluctuate and shares when sold or redeemed, may be worth more or less than their original cost. You can obtain performance information which is current through the most recent month-end by visiting ftportfolios.com.

[1]After Tax Held returns represent return after taxes on distributions. Assumes shares have not been sold. After Tax Sold returns represent the return after taxes on distributions and the sale of fund shares. Returns do not represent the returns you would receive if you traded shares at other times. Market Price returns are based on the midpoint of the bid/ask spread. Returns are average annualized total returns, except those for periods of less than one year, which are cumulative. The fund's performance reflects fee waivers and expense reimbursements, absent which performance would have been lower.

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or individual retirement accounts.

[2]Past performance is not a guarantee of future results. Performance information for the NYSE Arca Biotechnology Index[SM] is for illustrative purposes only and does not represent actual fund performance. No representation is being made that any investment will achieve performance similar to that shown. The Index does not charge management fees or brokerage expenses, and no such fees or expenses were deducted from the performance shown. Indexes are unmanaged and an investor cannot invest directly in an index. All index returns assume that dividends are reinvested when they are received.

Not FDIC Insured • Not Bank Guaranteed • May Lose Value

RISKS

The fund's shares will change in value, and you could lose money by investing in the fund. One of the principal risks of investing in the fund is market risk. Market risk is the risk that a particular stock owned by the fund, fund shares or stocks in general may fall in value.

The fund's return may not match the return of the NYSE Arca Biotechnology Index[SM]. The fund may not be fully invested at times. Securities held by the fund will generally not be bought or sold in response to market fluctuations. The fund may invest in small capitalization and mid capitalization companies. Such companies may experience greater price volatility than larger, more established companies.

Investors buying or selling fund shares on the secondary market may incur customary brokerage commissions. Investors who sell fund shares may receive less than the share's net asset value. Shares may be sold throughout the day on the exchange through any brokerage account. However, shares may only be redeemed directly from the fund by authorized participants, in very large creation/redemption units.

The fund is concentrated in stocks of companies in the biotechnology sector. You should be aware that an investment in a portfolio which is concentrated in a particular sector involves additional risks, including limited diversification. The companies engaged in the biotechnology sector are subject to fierce competition, substantial research and development costs, governmental regulations, pricing constraints, and their products and services may be subject to rapid obsolescence.

The fund is classified as "non-diversified." A non-diversified fund generally may invest a larger percentage of its assets in the securities of a smaller number of issuers. As a result, the fund may be more susceptible to the risks associated with these particular companies, or to a single economic, political or regulatory occurrence affecting these companies.

You should consider a fund's investment objectives, risks, and charges and expenses carefully before investing. Contact First Trust Portfolios L.P. at 1-800-621-1675 or visit www.ftportfolios.com to obtain a prospectus or summary prospectus which contains this and other information about a fund. The prospectus or summary prospectus should be read carefully before investing.