MARKET OBSERVATIONS
MAY 2024

SCHLINDWEIN ASSOCIATES
INVESTMENT COUNSEL

Themes

Interest in investing in certain themes has grown with the proliferation of exchange-traded funds ("ETFs"). Indeed, creators of ETFs have launched and marketed theme-oriented ETFs in anticipation of potential investor demand. Climate change is a broad investment theme that has spawned clean energy ETFs and an array of sub-theme ETFs including solar, water and batteries. Understanding how a clean energy ETF invests and the resultant outcomes are important when making such a theme investment. Important as well is knowing how such a theme investment interacts with other portfolio holdings. A review of clean energy experience may be informative for assessing the general role of theme investing.

PERSPECTIVE

Comparative return outcomes for two popular clean energy ETFs are available from 2007. Cumulative growth of an investment in each of these funds as well as that of the total U.S. stock market are shown in Chart I. The comparisons are quite stark. Over the whole 17-year period, annualized returns were +3.3% for Fund A, -6.9% for Fund B, and +9.7 % for the total stock market. In addition to lagging returns, these clean energy funds each gave investors an experience along the way that was twice as volatile as that of the total market. Lower returns and higher volatility have been costly for clean energy investors. The disparate returns of two funds with the same theme suggest meaningful differences in investment approach.

A common investment theme for ETFs does not ensure comparable investment approaches. Table I shows the top 10 stock holdings of two popular clean energy ETFs. The differences are notable. The portfolio of Fund A is quite concentrated with almost 10% invested in its largest stock position and a total of 57% in the top 10 holdings. The top 10 holdings for Fund B only total 19%. Fund A has a meaningful, direct exposure of 14% to electric vehicle manufacturers. The exposure of Fund B is only 1%. Among top 10 holdings, only First Solar is an overlapping position. The company is the world's largest thin-film solar module manufacturer. Its annualized stock return of +7.9% over the past 17 years has benefited the performance of each fund.

A clean energy investment theme brings an emphasis on technology. The return contribution of the technology component to two popular clean energy ETF portfolios is approximately 70% each. This contribution is significantly higher than that of the total U.S. stock market as shown in Chart II. The technology contribution has averaged 23% over time with wide variations. The annualized return of the overall technology sector over the past 17 years has been favorable at +15.1% versus that of the total U.S. stock market at +9.7%. Even with their heavy technology exposures, returns of the two popular clean energy ETFs have lagged well behind the total market and overall technology.

CHART I

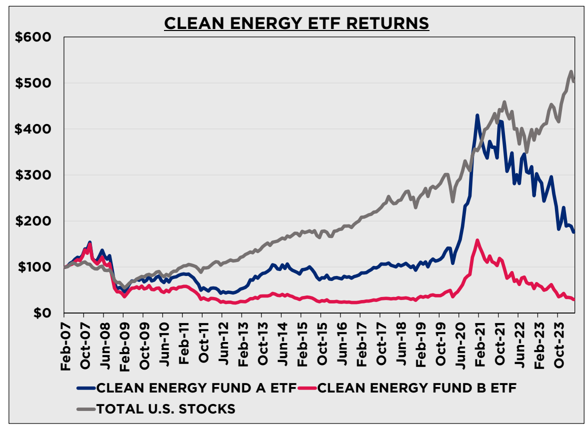
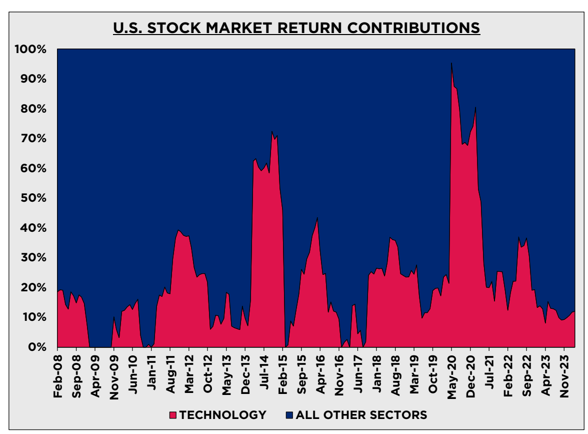


TABLE I

TOP 10 CLEAN ENERGY ETF HOLDINGS

CLEAN ENERGY FUND A ETF		CLEAN ENERGY FUND B ETF	
First Solar	9.9%	First Solar	2.1%
Enphase Energy	7.3%	Fluence Energy	2.0%
Tesla	7.3%	Sigma Lithium	1.9%
ON Semiconductor	7.3%	Solid Power	1.9%
Albemarle	7.2%	Bloom Energy	1.8%
Universal Display	4.0%	FREYR Battery	1.8%
Acuity Brands	3.9%	MP Materials	1.8%
Brookfield Renewable	3.6%	Enovix	1.8%
Rivian	3.6%	JinkoSolar	1.8%
Lucid	3.2%	Ormat Technologies	1.7%

CHART II



INVESTMENT IMPLICATIONS

Investing in a theme often reflects personal priorities and values that investors wish reflected in their portfolios. It is important to understand the price in so doing. The lagging performance and higher volatility experienced over time from some clean energy ETFs suggests that the cost of investing in this theme has been high. Investing pursues certain goals relative to time horizon and risk tolerance. Included in goals can be preferences that are addressed by an investment theme. Be aware of the related impact on return and risk, and on achieving goals.