Education

Liquidity

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Evaluate ETFs' Total Cost of Ownership

Two components make up the total cost of ownership (TCO) of an exchange traded fund (ETF): tracking return difference and investor trading costs. Tracking return difference covers the expense ratio, the portfolio management efficiency in seeking to match the index returns, and the positive offset of any income from lending out underlying securities of the ETF. And, because ETFs are bought and sold on an exchange like stocks, trading costs include the commission and the bid-ask spread.

Figure 1

How to Calculate TCO



Expense Ratio The fund's annual management fees that range from legal and marketing expenses to custodial and index licensing fees.

Portfolio Management Efficiency The impact of cash drag and implementation costs (rebalancing, replication strategies) of managing the portfolio relative to its benchmark.

Securities Lending Revenue The revenue earned by the fund for lending out underlying securities. This can potentially reduce, and in some cases offset, the expense ratio or associated portfolio management costs.

ETF Commissions The service charge by a broker for executing the purchase or sale of a security. Sometimes quoted as a flat fee, or on a per-share basis.

ETF Bid-Ask Spread The difference between the price a buyer is willing to pay for ETF shares and the price at which a seller is willing to sell.

Source: State Street Global Advisors.

A Low Expense Ratio Doesn't Guarantee the Lowest TCO

It's necessary to look beyond the expense ratio when evaluating TCO.

Figure 2 **ETF Cost Comparison**

ETF Costs (in Basis Points)	ABCETF	XYZETF
Expense Ratio	12	5
Portfolio Management Efficiency	3	5
Securities Lending Revenue (Minus)	7	3
Bid-Ask Spread	1	5
Commissions	2	2
Total Cost of Ownership	11	14

Source: State Street Global Advisors. For illustration purpose.

Evaluate TCO Based on How You Invest

Focusing on the part of the TCO equation that has the most impact on your portfolio may lower your costs. When evaluating ETFs with similar cost profiles, consider your:

- **Investment Strategy** For a strategic allocation, focus on the expense ratio, or the cost to "hold" the ETF. For tactical allocations, trading costs come more into play.
- **Rebalance Frequency** The more frequently you rebalance, the more emphasis is needed on the costs to trade, even if it is a "strategic" allocation.
- Portfolio Turnover When the size of the turnover increases, so do trading costs.

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Important Risk Information

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs' net asset value. Brokerage commissions and

ETF expenses will reduce returns.
There can be no assurance that a liquid market will be maintained for ETF shares.
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