Index Mutual Funds vs. ETFs

Which one is right for you?

By: Ritchie Colon-Peri
Agenda

• Father of indexing
• Mutual Funds
• Index Mutual Funds
• ETFs
• ETFs vs. Index Mutual Funds
• Relevance to us
John (Jack) C. Bogle

- “Time is your friend; impulse is your enemy.”
- Founded Vanguard Group in 1974
- Passive investing for everyone
What is a mutual fund?

• An investment vehicle made up of a pool of money collected from many investors for the purpose of investing in securities
• Operated by money managers to achieve capital gains and/or income for investors
• Investors buy shares of ownership in the fund and its income
• Open-ended vs. closed-ended
• Registered under the Investment Company Act of 1940
How shares are purchased

1. Marked to market for net asset value (NAV)
2. Investor wants to buy shares
3. Shares purchased at next available NAV
4. Fund buys shares to meet amount invested
5. Fund sells shares to meet amount redeemed
6. Investor wants to sell shares
7. Investor receives profits
Mutual fund fees

- Annual operating fees or expense ratio
  - Annual % of funds under management: 1-3%

- Shareholder fees
  - Commissions and redemptions
  - Short-term redemption
  - Transaction fees
  - Purchase fees
  - Exchange fees
  - Account fees
Mutual funds

Pros
• Diversification
• Professional management
• Easy access
• Individual-oriented
• Automatic transactions

Cons
• Costs
• Investment minimums
• Lack of transparency
• Cash holdings
• Price of investment
Index Mutual Funds

• Match or track components of an index
• Broad market exposure, low operating expenses and portfolio turnover
  • Fees often less than 1%
• Majority of mutual funds fail to beat S&P 500
• Vanguard 500 Index Fund
  • 0.14% expense ratio

Average annual returns—updated monthly
as of 10/31/2018

<table>
<thead>
<tr>
<th>Fund</th>
<th>1-yr</th>
<th>3-yr</th>
<th>5-yr</th>
<th>10-yr</th>
<th>Since inception 08/31/1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Index Fund Inv</td>
<td>7.20%</td>
<td>11.37%</td>
<td>11.18%</td>
<td>13.10%</td>
<td>10.96%</td>
</tr>
<tr>
<td>S&amp;P 500 Index* (Benchmark)</td>
<td>7.35%</td>
<td>11.52%</td>
<td>11.34%</td>
<td>13.24%</td>
<td>—</td>
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What is an Exchange Traded Fund?

• Marketable security that tracks a stock index, commodity, bonds, or basket of assets
• Trades like common stock on an exchange
• Divides ownership of assets into shares
• Leveraged, inverse, and non-benchmark ETFs
• Supply regulated through creation and redemption
Creation and redemption

Shares of ETF trading at premium

Authorized participant (AP) buys shares fund wants

Fund buys shares from AP in return for shares of ETF

ETF share creation lowers price in line with NAV

Shares of ETF trading at discount

AP buys shares of ETF on open market

AP sells shares of ETF to fund in return for underlying shares

ETF share redemption raises price in line with NAV
Legal structures

• Open-end fund
  • Majority of ETFs

• Unit investment trust (UITs)
  • No investment manager

• Grantor trust
  • Typically used for investing in physical commodities or currencies

• Exchange-traded notes
  • Debt instrument

• Partnerships
  • Usually organized for tax purposes
Criticisms of ETFs

• Flash crashes of May 2010 and August 2015
  • 2010 – ETFs exposed as complex securities
  • 2015 – underlying asset plunge left ETFs with no fair value

• Inflate stock prices
  • Improper allocation of stock holdings

• Influx of indexes reduce ability to price publicly traded securities

• BlackRock, Vanguard, and State Street are largest shareholders of 88% of companies in S&P 500

• Entices active vs passive trading
ETFs

**Pros**
- Diversification
- 1 share investment minimums
- Control over price of trade
- Low expense ratios
- Individual-oriented

**Cons**
- Risk exposure
- Complexity
- Speculative
- Commissions

![Expense ratio as of 04/25/2018](image)

This is 85% lower than the average expense ratio of funds with similar holdings.*

Save even more by investing in lower cost Admiral Shares or an ETF.
Why should we care?

• Retirement and investing plans
  • Both are potential vehicles to create a diversified portfolio for specific needs
  • Financial literacy important for investing
• Passive vs. active investing
• Relevance to financial markets
  • Buy-side vs. sell-side
Q&A