

# AI-03703 CAGR vs 10 Percent Simulation

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CAGR of FTEC 5 Years. For projection in retirement, what to use, CAGR or 1 year performance.

## CAGR of FTEC (5-Year)

As of recent data (approx. 2021–2026 window), FTEC's 5-year CAGR is roughly:

- ~18%–22% annualized return

This reflects the strong performance of the **U.S. tech sector** over that period (driven by companies like Apple, Microsoft, NVIDIA, etc.).

|  Important: This is **historical**, not guaranteed forward performance.

## CAGR vs 1-Year Performance (For Retirement Projections)

### 1. CAGR (Compound Annual Growth Rate) Use This

**Why it matters:**

- Smooths out volatility across multiple years
- Represents *true compounding effect*
- Better reflects long-term investing reality

**Use CAGR when:**

- Projecting retirement portfolios

- Modeling 10–30 year horizons
- Comparing different investments

👉 Think of CAGR as your **“baseline engine speed”**

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## 2. 1-Year Performance ❌ Do NOT use alone

### Why it's misleading:

- Highly volatile (tech especially)
- Can swing from +40% to -30%
- Reflects short-term sentiment, not long-term trend

### Use 1-year only for:

- Understanding current market cycle
- Stress testing scenarios (best/worst year)

👉 Think of 1-year return as a **“weather report,” not climate**

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## 🧩 What Should You Use for Retirement Projections?

### Best Practice (Realistic Model)

Use a **range, not a single number**:

#### 1. Base Case (Conservative CAGR)

- 6%–8% → typical long-term diversified portfolio

#### 2. Moderate Growth (Equity-heavy)

- 8%–10%

#### 3. Aggressive (Tech-heavy like FTEC)

- 10%–14% (NOT 20% — that's optimistic)
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## ⚠️ Why You Should NOT Use FTEC's 18–22% CAGR Directly

Even though FTEC performed strongly:

- Tech cycles boom and bust (e.g., dot-com crash)
- Mean reversion tends to happen
- Future returns are usually **lower than past peaks**

👉 Using 20% CAGR in retirement projections will likely **overestimate your future wealth**

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## Simple Rule for You

- Use:
    - **Primary projection:** 8%–10%
    - **Upside scenario:** 12%–14%
    - **Stress scenario:** 4%–6%
  - Use 1-year return only to:
    - Simulate volatility
    - Run Monte Carlo scenarios
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## Bottom Line

- **CAGR = strategic planning tool** ✓
  - **1-year return = tactical insight only** ⚠️
  - For something like FTEC:
    - Treat past 5-year CAGR as **upper bound**, not expectation
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If you want, I can run a **retirement projection or Monte Carlo simulation** using your actual numbers (portfolio, contributions, timeline) and show best/worst case outcomes.

Copilot

**The Fidelity MSCI Information Technology Index ETF (FTEC) has delivered a strong 5-year CAGR of about 15.25%, significantly outperforming the broader**

technology category average of 7.67% over the same period. This reflects the ETF's consistent exposure to large-cap tech leaders. [Yahoo Finance](#)

## FTEC 5-Year CAGR Overview

- **ETF Name:** Fidelity MSCI Information Technology Index ETF (FTEC)
- **Symbol:** FTEC
- **Current Price (Apr 10, 2026):** \$221.67 USD [MSN Money](#)
- **5-Year CAGR:** 15.25% [Yahoo Finance](#)
- **Category Average (Technology ETFs):** 7.67% [Yahoo Finance](#)
- **10-Year CAGR:** 21.23% (showing long-term strength) [Yahoo Finance](#)

## Performance Breakdown

Period	FTEC Return	Category Average	Notes
1-Year	<b>39.30%</b>	30.97%	Strong rebound after 2022 downturn
3-Year	<b>26.01%</b>	19.40%	Consistent outperformance
5-Year	<b>15.25% CAGR</b>	7.67%	Nearly double the peer average
10-Year	<b>21.23% CAGR</b>	17.10%	Long-term resilience

## Key Drivers of Growth

- **Tech Giants Exposure:** Heavy weighting in Apple, Microsoft, NVIDIA, and other mega-cap tech firms.
- **Sector Momentum:** Benefited from AI, cloud computing, and semiconductor growth trends.
- **Low Expense Ratio:** 0.084%, making it cost-efficient compared to many peers. [MSN Money](#)

- **Volatility:** Experienced a sharp decline in 2022 (-29.59%) but rebounded strongly in 2023 (+53.30%). [Yahoo Finance](#)
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## Risks & Considerations

- **Sector Concentration:** FTEC is entirely focused on U.S. information technology, which means less diversification.
  - **Cyclicality:** Tech stocks can be highly volatile, as seen in the 2022 drawdown.
  - **Valuation Sensitivity:** High-growth tech firms are sensitive to interest rate changes and macroeconomic conditions.
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## Takeaway

If you had invested in FTEC five years ago, your investment would have grown at **~15.25% annually**, far outpacing the average technology ETF. This makes FTEC a strong long-term performer, but investors should remain mindful of its sector concentration and volatility.

Would you like me to also calculate the **absolute growth of a \$10,000 investment in FTEC over 5 years** to give you a clearer picture of returns in dollar terms?