

AA-16

ETFS & FUNDS

ETFs, index funds, and mutual funds — owning the whole market in one ticker.

Alpha Academy · Team Alpha Trading

ETFs, Index Funds & Mutual Funds: Owning the Whole Market

Imagine you cannot decide which single apple to buy — one might be sweet, one bruised. Instead of gambling on one apple, you buy a fruit basket holding a little of everything. One bad apple no longer matters much.

An **ETF** and an **index fund** work like that basket, except the basket holds pieces of companies instead of fruit.

This chapter explains ETFs, index funds, and mutual funds — and how they differ. You will learn why so many beginners start here, what these funds cost, and why a tiny fee difference can quietly become thousands of dollars over time. No stock market experience needed — we define every word as we go.

> **NOTE**
> This chapter is education only — not financial advice, tax advice, or a recommendation to buy any specific fund. Fees, minimums, and rules can change, so check the fund's official information and talk to a qualified professional about your own money.

What Is a Fund?

A **fund** is a pool of money collected from many people, used to buy many investments at once.

- You put money into the fund, along with thousands of other people.
- The fund uses that giant pool to buy investments.
- You own a small slice of everything the fund owns.

Why do this? Buying hundreds of companies one by one takes a lot of money and time. A fund does it in a single purchase. And when one company in the fund fails or is badly run, it is only one of hundreds — a bad story that hurts a little instead of a lot.

What Is an ETF?

ETF stands for **exchange-traded fund**:

- **Fund** means it is a basket holding many investments.
- **Exchange-traded** means it trades on a stock exchange — the marketplace where stocks are bought and sold — just like a single stock.

An ETF, then, is a basket that trades like a stock.

You buy an ETF the same way you buy a share of a company. A **share** is one unit of ownership. ETFs have ticker symbols, the short letter codes identifying them, such as **SPY** or **VOO**, and their prices move during the trading day. A **trading day** for US stocks is normally Monday through Friday, 9:30 a.m. to 4:00 p.m. Eastern Time.

Example: with $500, you could gamble on one company — or buy an ETF holding 500 companies and spread the $500 across all of them. The basket did the spreading for you.

What Is an Index?

Before we can explain an index fund, we need the word **index**.

An **index** is a list of companies used to measure how part of the market is doing — like a class average on a test, which tells you more than one student's score.

The most famous US index is the **S&P 500**. It tracks 500 large US companies, including household names like Apple and Microsoft. When news anchors say "the market was up today," they often mean the S&P 500 went up.

Here is a key fact many beginners miss:

> **RULE**
> You cannot buy an index itself. An index is just a number and a list. You buy a fund that follows the index. The index is the scoreboard. The fund is how you play the game the scoreboard is measuring.

What Is an Index Fund?

An **index fund** is a fund built to copy an index as closely as possible. If the index is the S&P 500, the fund holds the same 500 companies in roughly the same proportions — if Apple is about 7% of the index, the fund holds about 7% Apple. The fund is not trying to be clever. It is trying to match the list.

Two of the best-known S&P 500 ETFs are **SPY** and **VOO**. Both follow the S&P 500, so one share of either owns a tiny piece of all 500 companies at once.

Say an S&P 500 ETF trades at $500 per share, and you buy 2 shares.

- Cost: 2 x $500 = $1,000, spread across all 500 companies.
- If the S&P 500 rises 10% over time, the fund should rise roughly 10% too, minus its small fee.
- If the S&P 500 falls 10%, the fund falls roughly 10% too.

That last point matters: a basket protects you from one company failing, not from the whole market falling. Index funds spread risk; they do not erase it.

Diversification: Do Not Put All Your Eggs in One Basket

Diversification means spreading your money across different investments so one bad result does not wreck you. It is the old saying made real: do not put all your eggs in one basket. Drop one basket of ten and you still have nine.

Stocks work the same way. One stock is one basket with one egg — very risky. Ten stocks in the same **industry**, a group of similar businesses like technology or banks, is better, but one bad year for that industry can pull all ten down together. A fund holding hundreds of companies across many industries is many baskets, so a bad year for one industry is cushioned by the others.

Diversification will not make you rich overnight. Its job is to keep one mistake, one scandal, or one failed company from ending your investing journey in the first year.

The Expense Ratio: The Fee You Pay Every Year

Every fund charges a fee for running the basket, called the **expense ratio** — a percentage of your money, charged each year. It sounds tiny. Over time, it is not.

Worked example: you invest $10,000.

- **Fund A charges 0.03% per year:** 0.0003 x $10,000 = $3 per year.
- **Fund B charges 1% per year:** 0.01 x $10,000 = $100 per year.

Same money — a $97 difference in the first year alone.

Now stretch it out. Fees are charged every year, and money paid in fees is no longer invested, so it cannot grow for you later. Over 20 or 30 years, a high fee can quietly eat tens of thousands of dollars of growth. You never write a check for this fee — it is taken out behind the scenes, which is exactly why beginners ignore it. Do not ignore it.

> **RULE**
> Before you buy any fund, find its expense ratio. A lower fee for the same basket leaves more of the return in your pocket.

Index funds are famous for very low fees because copying a list is cheap — no large research team is needed to copy the S&P 500.

Active vs Passive: Two Different Jobs

Funds come in two styles.

Passive means the fund follows a fixed list or rule and does not try to outsmart the market. Index funds are passive: copy the index, keep costs low, do not improvise.

Active means a manager — a person or team making decisions — picks investments they believe will beat the index, researching companies and trading more often.

In plain English: passive is a bus that follows a fixed route for a cheap fare. Active is hiring a driver who promises a faster route, charges much more, and might get you there sooner — or might get lost.

Active funds charge more because research and trading cost money. Sometimes a manager beats the index for a while, but over long periods many active funds fail to beat a simple low-cost index fund after fees. That widely reported fact is the main reason index funds became so popular. Neither word means "good" or "bad" — just know what job you are paying for, and what it costs.

Mutual Funds vs ETFs

A **mutual fund** is the older cousin of the ETF — also a basket, and many index funds are mutual funds. The biggest differences are how and when you buy and sell.

Feature	ETF	Mutual Fund
When it gets a price	All day, price changes minute by minute	Once per day, after the market closes
How you buy it	In your brokerage account, like a stock	Often directly from the fund company or through a broker
Typical minimum to start	The price of one share, and many brokers allow fractional shares	Often a set minimum, like $1,000 or $3,000, though some are lower

Feature	ETF	Mutual Fund
Taxes, in one line	Often a little more tax-efficient because of how shares are created and redeemed	Can sometimes pass capital gains to holders even in a year you did not sell

A **brokerage account** is an account at a licensed firm, called a **broker**, that lets you buy and sell investments. **Fractional shares** are partial shares — you can invest $50 into a fund whose full share costs $500. A **capital gain** is a profit made by selling something for more than you paid; taxes are personal, so treat the tax line above as a general idea only.

Which is better? For most beginners, what matters most is the expense ratio, what the fund holds, and whether you will stick with it. Both are baskets. An ETF gives you live prices all day; a mutual fund's one price a day stops some people from watching the price every five minutes.

> **NOTE**
> Mutual fund minimums, fees, and tax treatment vary. Check the fund's official documents, and talk to a tax professional for tax questions. Education only, not tax advice.

Popular ETF Categories

ETFs come in many flavors. Here are the ones you will see most often.

Broad Market ETFs

These hold most of the stock market or a major index like the S&P 500 — hundreds or thousands of companies across every industry. For many beginners, this most-diversified purchase is the starting point.

Sector ETFs

A **sector** is one slice of the economy — technology, health care, energy, or banks. A sector ETF holds only that slice.

Sector ETFs are more focused, which means more risk. If technology has a great year, a technology ETF can shine. If it has a terrible year, there is no cushion from other industries, because you did not buy them.

Dividend ETFs

A **dividend** is a cash payment a company sends its shareholders — a small thank-you check for owning the stock. A dividend ETF focuses on companies that pay higher dividends.

Dividends are never guaranteed — a company can reduce or stop its dividend at any time. A high dividend also does not automatically mean a good investment, because the share price can fall while you collect the payments.

Bond ETFs

A **bond** is a loan you make to a government or company. They pay you interest, and pay the loan back later. A bond ETF holds many bonds at once.

Bond ETFs are often held to balance stock ETFs, because bonds have historically moved less wildly than stocks. They can still lose value, especially when **interest rates**, the cost of borrowing money, rise. Bonds get a full chapter later in this course.

Leveraged ETFs

A **leveraged ETF** uses borrowed money and complex contracts to multiply the daily move of an index. If the index rises 1% in a day, a 2x leveraged ETF aims to rise about 2% that day — and to fall about 2% if the index falls 1%.

> **RISK**
> Leveraged ETFs reset every single day. That means their results over weeks or months can drift far from simply "2 times the index," and they can lose value even in a sideways market. They are built for very short-term trades by experienced traders, not for beginners to buy and hold — many beginners have lost most of their money holding them.

Common Beginner Mistakes

- **Buying a fund without checking the expense ratio.** Two funds can hold nearly the same basket while one charges 30 times more per year.
- **Thinking an index fund cannot lose money.** It absolutely can — when the whole market falls, the fund falls with it.
- **Buying five funds that all hold the same companies.** Five S&P 500 funds is still one basket, not five. Check what a fund actually holds.
- **Chasing last year's winning sector.** A sector that just had a huge year is often expensive and risky, not automatically a good buy.
- **Holding leveraged ETFs for weeks.** The daily reset works against long-term holders.
- **Selling everything in the first market drop.** Drops are normal for stock funds. Panic-selling turns a temporary drop into a permanent loss.
- **Ignoring what the ticker actually is.** Similar names can be very different funds. Read the full name and what it holds before buying.

Chapter Summary

- A fund pools money to buy many investments at once, so one purchase can own hundreds of companies.
- An ETF is a fund that trades on an exchange like a stock, with prices moving all day.
- An index is a measuring list, like the S&P 500. You cannot buy it; you buy a fund that follows it.
- An index fund copies its index instead of trying to outsmart it, which keeps fees very low.
- Diversification spreads money across many companies and industries so one failure cannot wreck you.
- The expense ratio is the yearly fee: on $10,000, 0.03% costs $3 a year; 1% costs $100 — a gap that compounds over decades.
- Passive funds follow a fixed list; active funds pay managers to pick investments and charge more.
- Mutual funds price once a day after the close and may have minimums; ETFs trade all day.
- Leveraged ETFs reset daily and are dangerous for beginners to hold.

Check Yourself

1. In your own words, what is an ETF?

2. Can you buy the S&P 500 index itself? If not, what do you buy instead?
3. You invest $10,000 in a fund with a 1% expense ratio. About how much do you pay in fees in the first year?
4. What is the difference between when an ETF gets its price and when a mutual fund gets its price?
5. Why are leveraged ETFs risky to hold for weeks or months?

Answers: 1) A fund — a basket holding many investments — that trades on an exchange like a single stock, so one purchase can own hundreds of companies. 2) No. An index is just a list and a number; you buy a fund that follows it, like an S&P 500 ETF such as SPY or VOO. 3) About $100, because 1% of $10,000 is $100. 4) An ETF's price changes all day while the market is open; a mutual fund gets one price per day, after the close. 5) Their leverage resets daily, so over time their results can drift badly from a simple multiple of the index, and they can bleed value even in a flat market.

> **RULE**
> Own the basket before you try to pick the winners — and always know the fee you are paying for it.