

St. Joseph School finlit Course
7th Grade & 8th Grade
Winter Term 2022 - 2023
February 16, 2023

Planning for the future
Class 31:
Investment
Funds - “Baskets”
of Investments





NITWOM

News In The World Of Money

02/16/2023: The Producer Price Index (“PPI”) measures changes in prices for the domestic market of **raw goods and services**. PPI is a **leading indicator** of the Consumer Price Index (“CPI”). CPI is one measure of the inflation rate. **PPI increased 0.7% in January, much higher than the 0.4% estimate**. Excluding food and energy, which are the more volatile components, core PPI increased 0.5%, compared with expectations of a 0.3% increase. [[Source](#)]



Who has
heard of
investment
funds? What
do you think
they are?



What Are Investment Funds?

Pools of money from many investors used to collectively purchase securities based on investment fund objectives

1

Funds for All Investors

Transparent with **widely** available public information and **heavily** regulated

Examples: Mutual Funds and Exchange Traded Funds

2

Accredited Investors Only

Opaque with **limited** available public information and **more loosely** regulated

Examples: Hedge Funds, Private Equity Funds, and Venture Capital Funds

**Out of Scope
for finlit**

What Are Investment Funds?

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Share Price

2

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available public
information and more
loosely regulated~~

~~**Examples:** Hedge
Funds, Private Equity
Funds, and Venture
Capital Funds~~

Recap Mutual Funds and Exchange Traded Funds (“ETFs”)

- Investors may **diversify investments across many securities** by investing in only one security – a Mutual Fund or an ETF. How?
- Let’s consider a shopping market as a metaphor:
 - **Mutual Funds** use “professional shoppers” known as portfolio managers to determine what securities go into or out of investors’ shopping baskets
 - **ETFs** are “pre-built packages of securities” that investors put into or out of their shopping baskets





As we learned, the S&P 500 Index is composed of approximately 500 of the largest U.S. companies. Suppose I want investment exposure to S&P 500 Index, how might I get it?

The S&P 500 Index is composed of approximately 500 of the largest U.S. companies. Suppose I want investment exposure to S&P 500 Index, how might I get it?

Option 1

Buy every S&P 500 company. Adjust when the index changes. Rebalance when the portfolio drifts.



Option 2

Buy a mutual fund or that tracks the S&P 500 such as the Fidelity 500 Index Fund (FXAIX)

Option 3

Buy an ETF that tracks the S&P 500 such as the SPDR S&P 500 ETF Trust (SPY)

Mutual Fund and ETF Benefits



Affordability

Low minimum investment requirements and operating expenses make it cost efficient for investors.



Convenience

Automatic investment options enable hassle-free and convenient investing over time, which makes dollar cost averaging very easy.



Diversification

A broad basket of stocks, bonds, and/or other investments within Mutual Funds and ETFs reduces the effects of single asset risks.



Professional Management

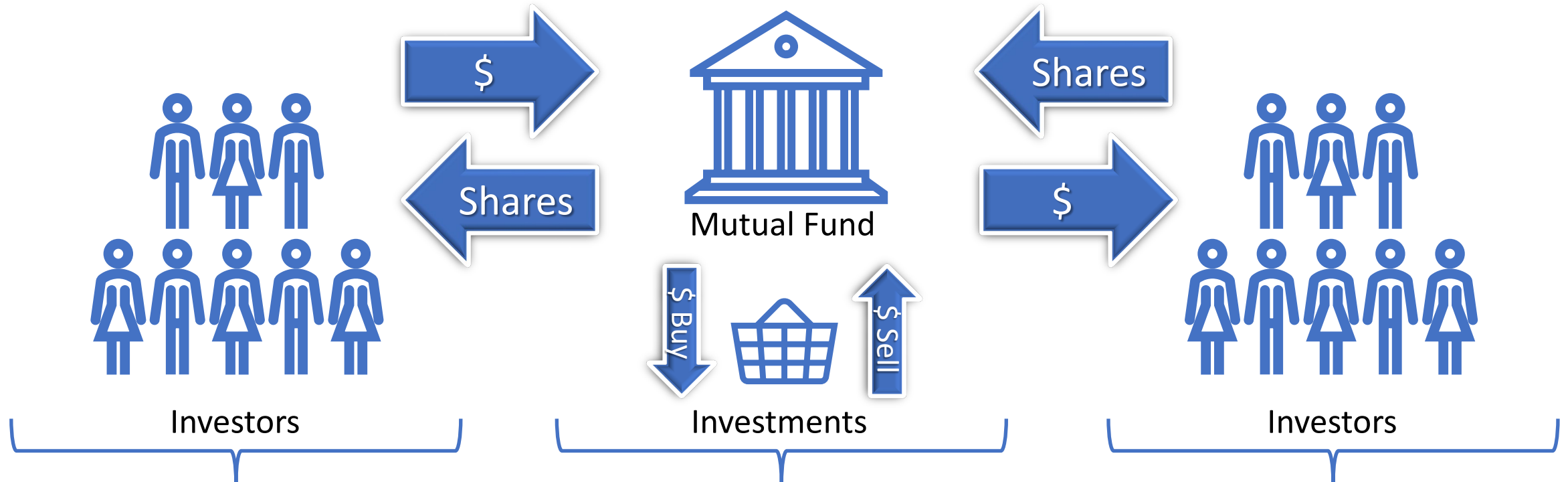
Mutual funds and ETFs are managed and operated by investment professionals who apply prudent stewardship practices over the investment funds.



Transparent

Mutual Funds and ETFs have extensive public information available. Investors can easily learn how funds are invested and how much the funds cost.

How Mutual Funds Work



Buy a Mutual Fund

Investors **purchase shares** in a mutual fund in exchange for their cash. Investors' cash **enters** the mutual fund.

Managers Invest \$

Mutual fund managers **buy** and **sell** investments like stocks and/or bonds based on **the mutual fund's objectives**.

Sell a Mutual Fund

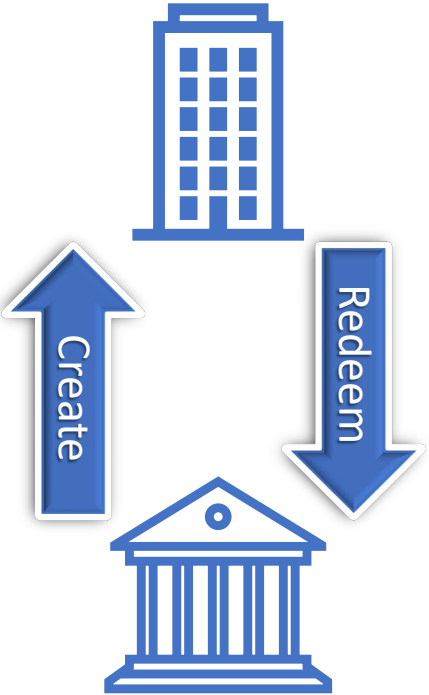
Investors **redeem shares** in exchange for cash from the mutual fund. Cash **exits** the mutual fund.



When an investor redeems mutual fund shares, where does the cash come from to pay out the investor's redemption?

How ETFs Work

Authorized Participant



ETF Issuer

Step 2

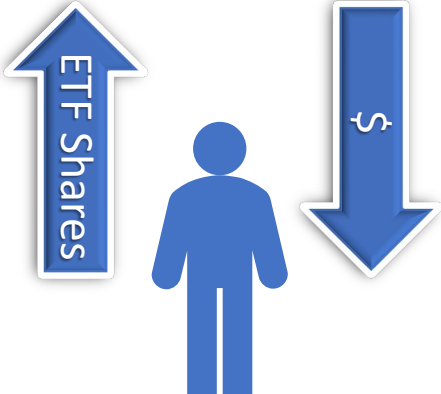
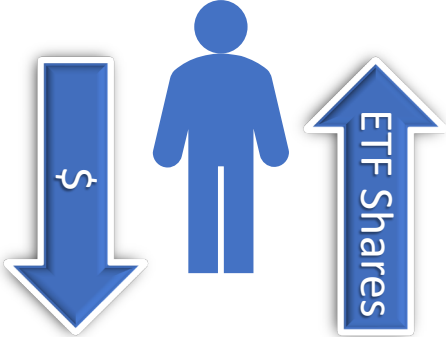
Authorized Participant adds or removes ETF shares to or from the market.



Step 1

ETF Issuer creates or redeems ETF shares with an Authorized Participant. 1 creation unit typically = 50,000 ETF shares.

ETF Buyer



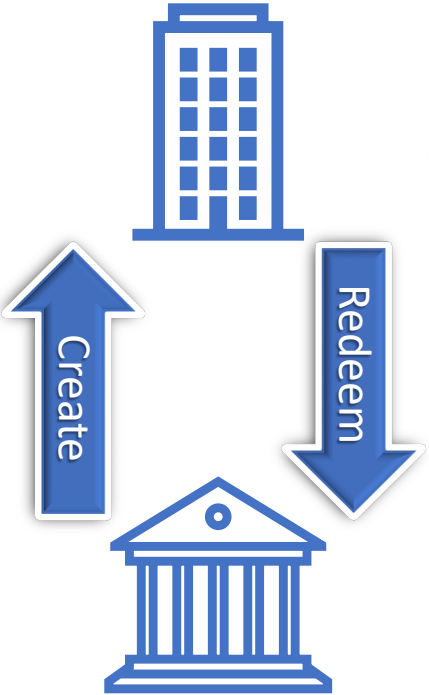
ETF Seller

Step 3

ETF shares are bought or sold on an exchange by investors, just like individual stocks.

How ETFs Work

Authorized Participant



ETF Issuer

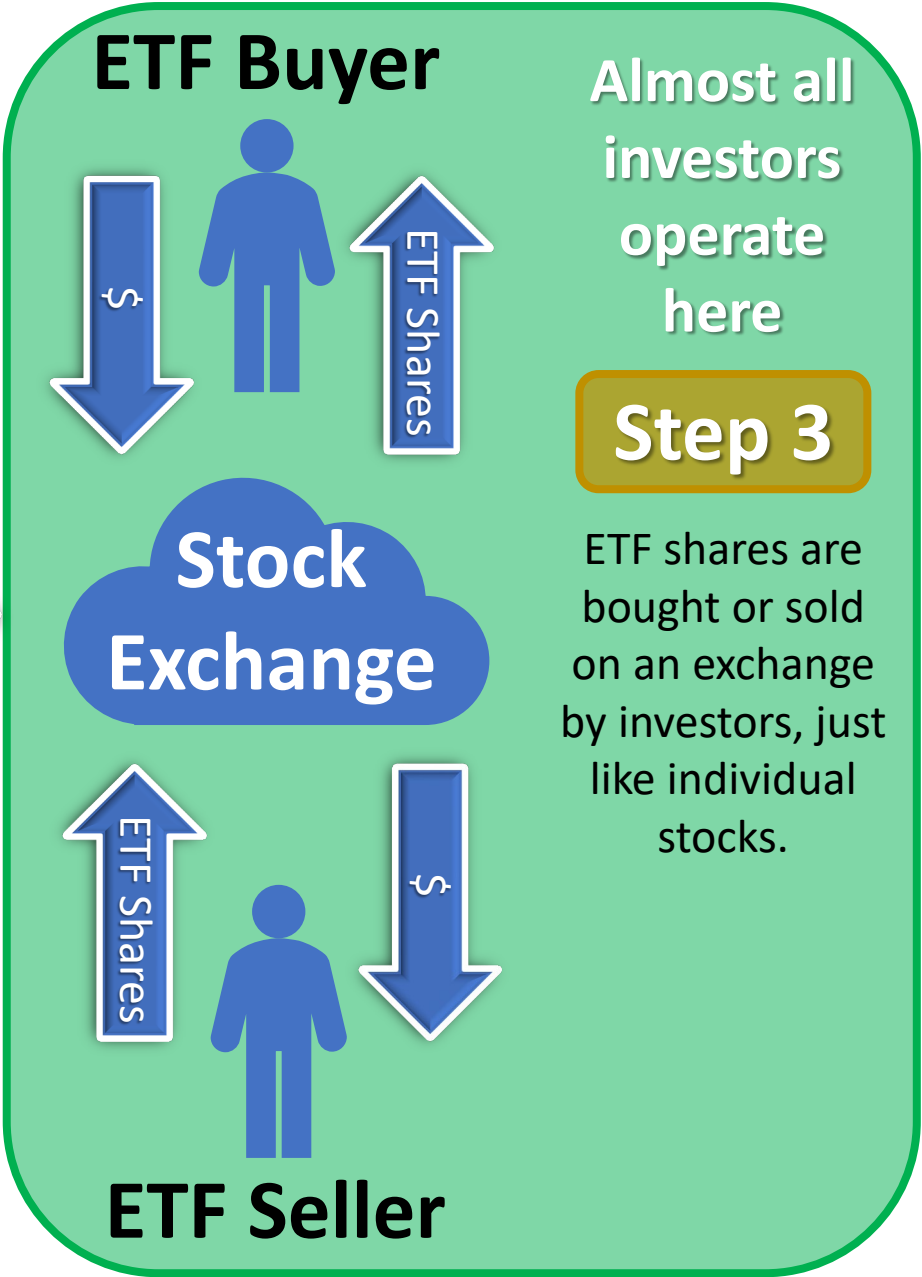
Step 2

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Select ETF & Mutual Fund Types



Broad Market Index Funds

- Match the composition of a broad market index
- **Example: S&P 500 Index**



Investment Style Box Funds

- Focus on investments that match certain category criteria
- **Example: US Large Cap Value**



Sector Funds

- Focus on specific sectors of the economy
- **Example: Technology Sector**



Target Date Funds

- Reduce investment risk as a target date approaches
- **Example: Retirement 2040**

Morningstar® Equity Style Box

<https://www.morningstar.com>

		Classifies Mutual Funds and ETFs Focused on <u>Stocks</u>		
Market Capitalization (Company Size)	Large Cap (top 70% of capitalization)	1	2	3
	Mid Cap (next 20% of capitalization)	4	5	6
	Small Cap (balance of capitalization)	7	8	9
		Value	Blend	Growth
		Investment Style		

Morningstar® Fixed Income Style Box with Examples

<https://www.morningstar.com>

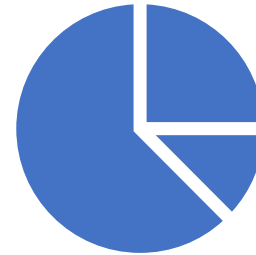
		Classifies Mutual Funds and ETFs Focused on <u>Bonds</u>		
Credit Quality	High (>AA-)	a	b	c
	Medium (>BBB- <AA-)	d	e	f
	Low (<BBB-)	g	h	i
		Limited	Moderate	Extensive
		Interest Rate Sensitivity		

Mutual Fund and ETF Management Approaches



Active management

Fund managers select individual securities **based on research and analysis**. Fund managers buy and sell securities to **outperform a benchmark index**. *Most active fund managers struggle to beat benchmark indexes over long periods.*



Index management

Fund managers select individual securities **to match a benchmark index**. Fund managers buy and sell securities **in proportion to the benchmark index**. *Index funds will always slightly lag the benchmark index because of the fund's fees and expenses.*

Annual Fund Costs at Various Operating Expense Ratios and Investment Amounts

		Amount Invested in a Mutual Fund or ETF						
		\$ 1,000	\$ 5,000	\$ 10,000	\$ 50,000	\$ 100,000	\$ 500,000	\$ 1,000,000
Operating Expense Ratio	0.10%	\$ 1	\$ 5	\$ 10	\$ 50	\$ 100	\$ 500	\$ 1,000
	0.20%	\$ 2	\$ 10	\$ 20	\$ 100	\$ 200	\$ 1,000	\$ 2,000
	0.30%	\$ 3	\$ 15	\$ 30	\$ 150	\$ 300	\$ 1,500	\$ 3,000
	0.40%	\$ 4	\$ 20	\$ 40	\$ 200	\$ 400	\$ 2,000	\$ 4,000
	0.50%	\$ 5	\$ 25	\$ 50	\$ 250	\$ 500	\$ 2,500	\$ 5,000
	0.60%	\$ 6	\$ 30	\$ 60	\$ 300	\$ 600	\$ 3,000	\$ 6,000
	0.70%	\$ 7	\$ 35	\$ 70	\$ 350	\$ 700	\$ 3,500	\$ 7,000
	0.80%	\$ 8	\$ 40	\$ 80	\$ 400	\$ 800	\$ 4,000	\$ 8,000
	0.90%	\$ 9	\$ 45	\$ 90	\$ 450	\$ 900	\$ 4,500	\$ 9,000
	1.00%	\$ 10	\$ 50	\$ 100	\$ 500	\$ 1,000	\$ 5,000	\$ 10,000

Mutual Fund and ETF Fees

- Investment funds charge an Operating Expense Ratio (“OER”)
- The OER is % of assets under the fund’s management
- The greater an investor’s balance, the greater the annual cost

Coming Up on Investments – Deep Dives Into...

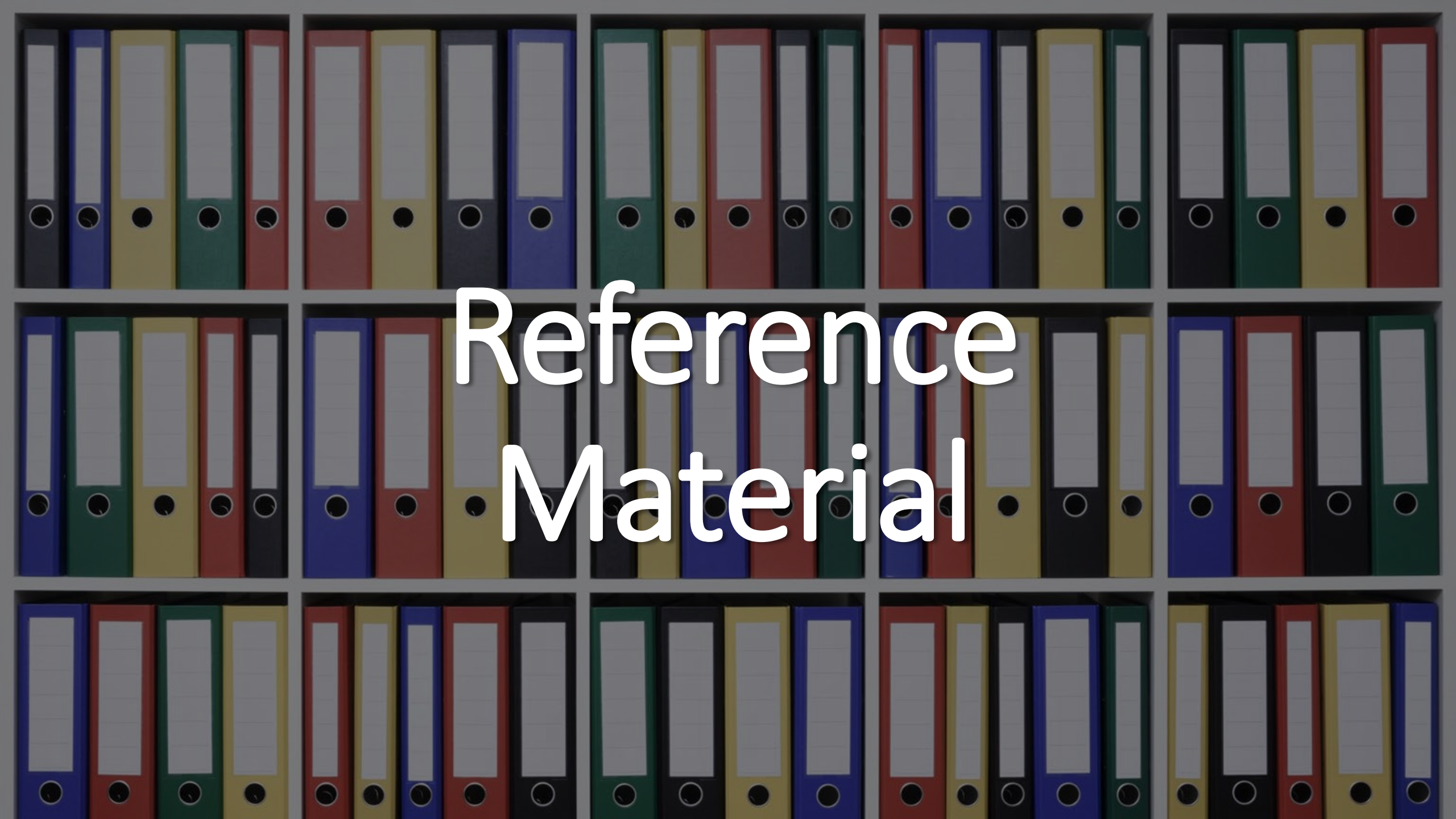
- ✓ 1. Introduction,
- ✓ 2. Financial Objectives,
- ✓ 3. Managing Risk,
- ✓ 4. Equities (Stocks),
- ✓ 5. Fixed Income (Bonds),
- ✓ 6. Mutual Funds & ETFs,
- 7. Putting it All Together.



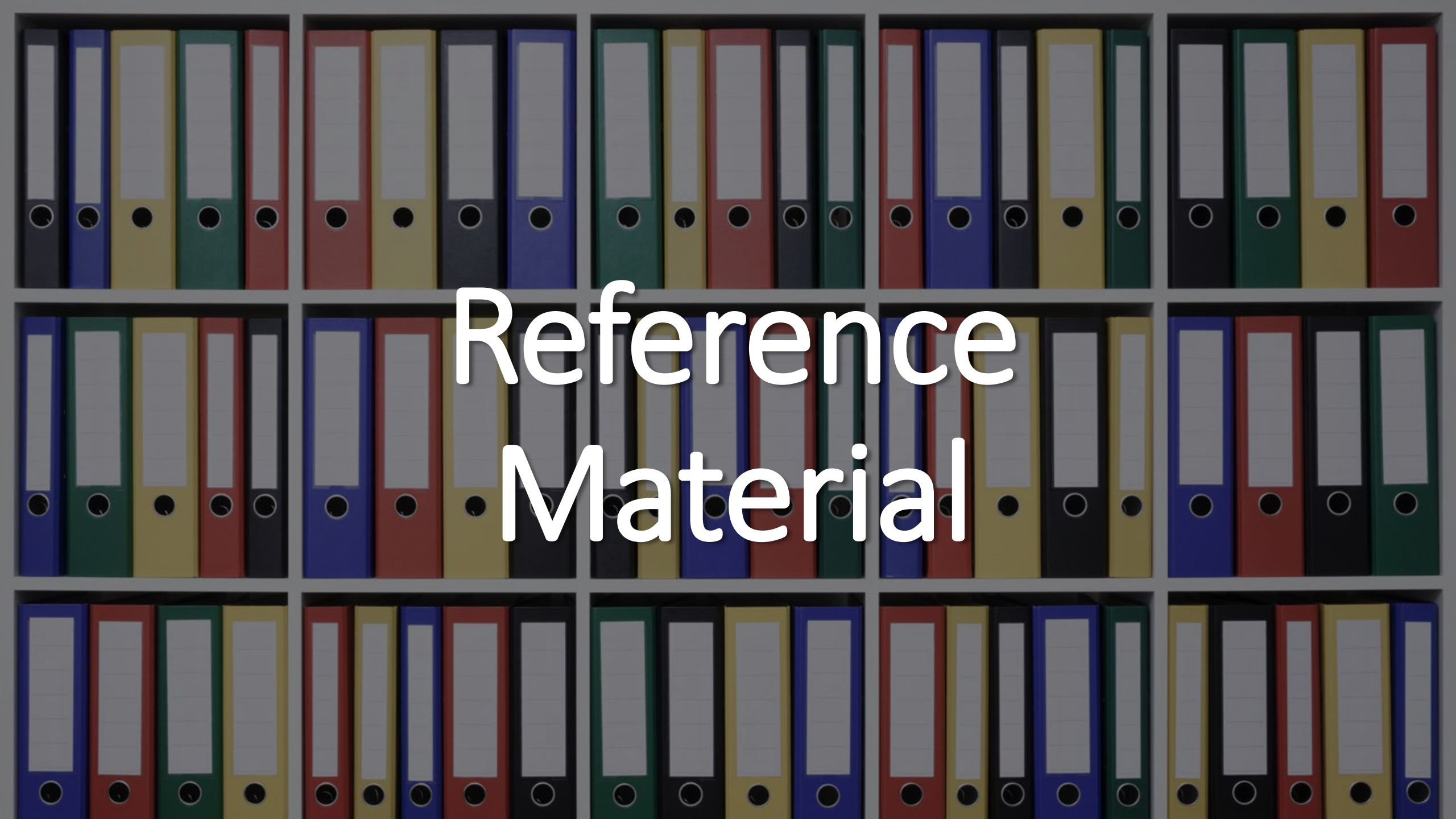


Key Takeaways

- Mutual funds and ETFs enable investors to broadly diversify investments through the convenience of a single security
- Mutual funds and ETFs can be actively managed or track an index
- Mutual funds and ETFs make money by charging an operating expense ratio on the funds invested



Reference Material



Reference Material

Mutual Funds Overview



Mutual funds are investment companies that pool money from shareholders to invest in securities such as stocks, bonds, and other assets.



Investors buy mutual fund units or shares in exchange for transferring money into the mutual fund.



The added cash gives the mutual fund's professional asset managers money to invest, based on the mutual fund's objectives.



All mutual fund investors share in the gains (or losses) of the mutual fund based on the number of shares each investor owns.



If stocks or bonds represent groceries at a market, then think of a mutual fund as a professional shopper, who decides which groceries to buy.



The world's largest Mutual Fund is the Vanguard Total Stock Market Index (Ticker: VTSAX) with \$276 Billion in assets and operating expenses of 0.04%

Exchange Traded Fund (ETF) Overview

An ETF is a “basket” of securities (ex. stocks or bonds) that trades on an exchange, just like stocks do.

ETF share prices fluctuate during each trading day, as ETFs are bought and sold by investors. In contrast, mutual funds trade only once each trading day, after markets close.

If stocks or bonds represent groceries at a market, then think of an ETF as a basket of vegetables from the produce section -- another ETF might be a basket of breads from the bakery section.

The world’s largest ETF is the SPDR S&P 500 ETF Trust (Ticker: SPY) with \$379 Billion in assets and operating expenses of 0.09%.



SPDR® S&P 500 ETF Trust

SPY: NYSE Arca

Historical Price Performance



Fund Strategy

The investment seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the S&P 500® Index. The Trust seeks to achieve its investment objective by holding a portfolio of the common stocks that are included in the index (the "Portfolio"), with the weight of each stock in the Portfolio substantially corresponding to the weight of such stock in the index.

Performance Returns

Data as of 01/31/2023

This section contrasts the SPDR® S&P 500 ETF Trust (SPY) to its benchmarks

	Cumulative Returns %				Annualized Returns %			
	YTD	1 Mo	3 Mo	6 Mo	1 Yr	5 Yr	10 Yr	Since Inception
SPDR® S&P 500 ETF Trust Market	+8.3	+8.3	+5.7	-0.5	-8.2	+9.5	+12.6	+9.7
SPY NAV	+8.3	+8.3	+5.7	-0.5	-8.3	+9.5	+12.6	+9.7
Large Blend Morningstar Category	+6.0	+6.0	+6.3	+0.8	-7.0	+8.4	+11.4	-
S&P 500 TR USD Broad-Based Index	+8.3	+8.3	+5.8	-0.4	-8.2	+9.5	+12.7	+10.7
S&P 500 TR USD Best Fit Index	+8.3	+8.3	+5.8	-0.4	-8.2	+9.5	+12.7	+10.7

Standardized Quarterly Total Return

Data as of 12/31/2022

	1 Yr	5 Yr	10 Yr	Since Inception
SPDR® S&P 500 ETF Trust Market	-18.2	+9.3	+12.5	+9.5
SPDR® S&P 500 ETF Trust NAV	-18.1	+9.4	+12.5	+9.5

Performance data quoted represents past performance and does not indicate future results. Visit schwab.com for month-end performance information. Current performance may be lower or higher. Investment value will fluctuate, and shares, when redeemed may be worth less than original cost. Please visit <http://schwab.com> for more recent performance information.

Investors in ETFs should consider carefully information contained in the prospectus, including investment objectives, risks, charges and expenses. You can request a prospectus by calling 800-435-4000. Please read the prospectus carefully before investing.

Schwab Exchange Traded Funds Report Card

Report generated on 02/14/2023, 02:15PM

PRICE
Data as of 02/14/2023
\$412.34

TODAY'S CHANGE
Data as of 02/14/2023
-\$0.49 (-0.12%)

QUOTE SUMMARY
as of 02/14/2023, 02:00PM EST

Day's Range \$408.51 - 415.05
52 Week Range \$348.11 - 462.07
Average Volume (10 Day) 82,655,383.00
SEC Yield 1.54%
Distribution Yield 1.56%
Previous Ex-Date 12/16/2022
Previous Pay Date 01/31/2023

FUND PROFILE

Inception Date 01/22/1993
Category Large Blend
Fund Family SPDR State Street Global Advisors
Total Assets \$380.0 Billion
Gross Expense Ratio 0.09%
Net Expense Ratio 0.09%

A net expense ratio lower than the gross expense ratio may reflect a cap on or contractual waiver of fund expense. Please read the fund prospectus for details on limits or expiration dates for any such waivers.

Morningstar Rating
as of 01/31/2023

Overall Rating **★★★★★** Out of 1227 Funds
3 Year Rating **★★★★★** Out of 1227 Funds
5 Year Rating **★★★★★** Out of 1119 Funds
10 Year Rating **★★★★★** Out of 822 Funds

Historical Return **Low** | High
Historical Risk **Low** | High

Past performance is no guarantee of future results. The ratings reflect historical risk-adjusted performance and the overall rating is derived from a weighted average of the fund's 3, 5 and 10 year Morningstar Rating metrics.

MARKET EDGE SECOND OPINION®

Market Edge Second Opinion®
AVOID | NEUTRAL | **LONG**

Market Edge Power Rating
-50 | 0 | 100
WEAKER | STRONGER

Market Edge Score
-4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4
DETERIORATING | IMPROVING

Stock is a Buy.



SPDR® S&P 500 ETF Trust

SPY: NYSE Arca

Cumulative Growth of \$10,000 Investment



This graph represents the growth of a hypothetical investment of \$10,000. It assumes reinvestment of dividends and capital gains, and does not reflect sales loads, redemption fees or the effects of taxes on any capital gains and/or distributions.

Tax Analysis

Data as of 01/31/2023

	Cumulative Returns %				Annualized Returns %			
	YTD	1 MO	3 MO	6 MO	1 YR	5 YR	10 YR	SINCE INCEPT
Load Adjusted Total Returns	+8.3	+8.3	+5.7	-0.5	-8.3	+9.5	+12.6	+9.7
SEC Pre-Liquidation Market Returns	+8.3	+8.3	+5.5	-0.8	-8.8	+8.8	+11.8	+9.1
SEC Post-Liquidation Market Returns	+3.7	+3.7	+3.4	-0.3	-4.9	+7.2	+10.1	+8.3
Tax Cost Ratio Market Returns	-	-	-	-	+0.7	+0.6	+0.7	-

Rank Within Category For Annual Total Return %

Rank within Category compares this fund's total annual return to that of other funds in the same category, and its figures are not adjusted for load, sales charge, or taxes.

Top Ten Holdings

as of 01/31/2023

Symbol	Company Name	Industry	Percent of Assets
AAPL	Apple Inc	Technology Hardware, Storage & Peripherals	6.64%
MSFT	Microsoft Corp	Software	5.84%
AMZN	Amazon.com Inc	Internet & Direct Marketing	2.55%
BRK/B	Berkshire Hathaway Inc Class B	Diversified Financial Services	1.63%
GOOGL	Alphabet Inc Class A	Interactive Media & Services	1.63%
NVDA	NVIDIA Corp	Semiconductors & Semiconductor Equipment	1.57%
TSLA	Tesla Inc	Automobiles	1.51%
GOOG	Alphabet Inc Class C	Interactive Media & Services	1.45%
XOM	Exxon Mobil Corp	Oil, Gas & Consumable Fuels	1.4%
UNH	UnitedHealth Group Inc	Health Care Providers & Services	1.34%

Top 10 Holdings in SPY 25.55% | Top 10 holdings are 25.55% of the total portfolio assets.
Category Average 36.46% | The Large Blend category average is 36.46%

Fund holdings subject to change and not a recommendation to transact in any security.

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\$412.34

TODAY'S CHANGE
Data as of 02/14/2023
-\$0.49 (-0.12%)

PORTFOLIO OVERVIEW
as of 02/14/2023

Total Number of Holdings 505
Non-Diversified Portfolio No
Portfolio Turnover 2%
Distinct Portfolio Yes

SECTOR WEIGHTINGS
as of 01/30/2023

Sector Name	YTD Perf (%)	% of Assets
Information Technology	+15.8	26.5
Health Care	-1.2	14.7
Financials	+7.4	11.7
Consumer	+16.6	10.6
Discretionary		
Industrials	+5.8	8.4
Communication Services	+2.4	7.8
Consumer Staples	-0.3	6.7
Energy	+6.4	5.1
Utilities	-3.2	2.9
Materials	+7.1	2.8
Real Estate	+9.4	2.8

ASSET BREAKDOWN
as of 01/31/2023

	% Long	% Short	% Net
Domestic Stock	98.83	0.0	98.83
Non-US* Stock	1.12	0.0	1.12
Cash	0.05	0.0	0.05

*Non-US assets include assets without a specific country classification

MARKET CAPITALIZATION
as of 01/31/2023

Market Capitalization	Percent of Assets
Giant Cap	48.8%
Large Cap	35.3%
Medium Cap	15.8%
Small Cap	0.1%