CHAPTER 4

US Exchange-Traded Funds

ETFs are a convenient, cost-effective tool for investors seeking to gain or shed exposure to broad markets, particular sectors or geographical regions, or specific investment strategies. Demand for ETFs has grown markedly as investors—both institutional and retail—increasingly turn to them as investment options. In the past 10 years, net share issuance of ETFs has totaled $4.5 trillion. As investor demand has increased, sponsors have offered more ETFs with a greater variety of investment objectives. With $8.1 trillion in total net assets at year-end 2023, the US ETF industry remained the largest in the world.

IN THIS CHAPTER

What Is an ETF?

An exchange-traded fund (ETF) is a pooled investment vehicle with shares that investors can buy and sell throughout the day on a stock exchange at a market-determined price. Investors may buy or sell ETF shares through a broker or in a brokerage account just as they would the shares of any publicly traded company. ETFs have been available as an investment product for 30 years in the United States. Most ETFs are structured as open-end investment companies (like mutual funds) or unit investment trusts (UITs) and are governed by the same regulations. Other ETFs—primarily those investing in commodities, currencies, and futures—have different structures and are subject to different regulatory requirements.

ETF Total Net Assets

At year-end 2023, the US ETF market—with 3,108 funds and $8.1 trillion in total net assets—remained the largest in the world, accounting for 72 percent of the $11.3 trillion in ETF net assets worldwide.* Within the United States, total net assets in ETFs accounted for 24 percent of assets managed by investment companies at year-end 2023 (see Figure 2.1). ETFs have been available for 30 years, and throughout that time, large-cap domestic equity ETFs have accounted for a substantial proportion of ETF net assets. At year-end 2023, net assets in large-cap domestic equity ETFs totaled $2.7 trillion, or 33 percent of ETF net assets (Figure 4.1). Bond ETFs, which have been fueled by strong investor demand over the past several years, accounted for $1.5 trillion (18 percent) of ETF net assets.

Learn More About ETFs

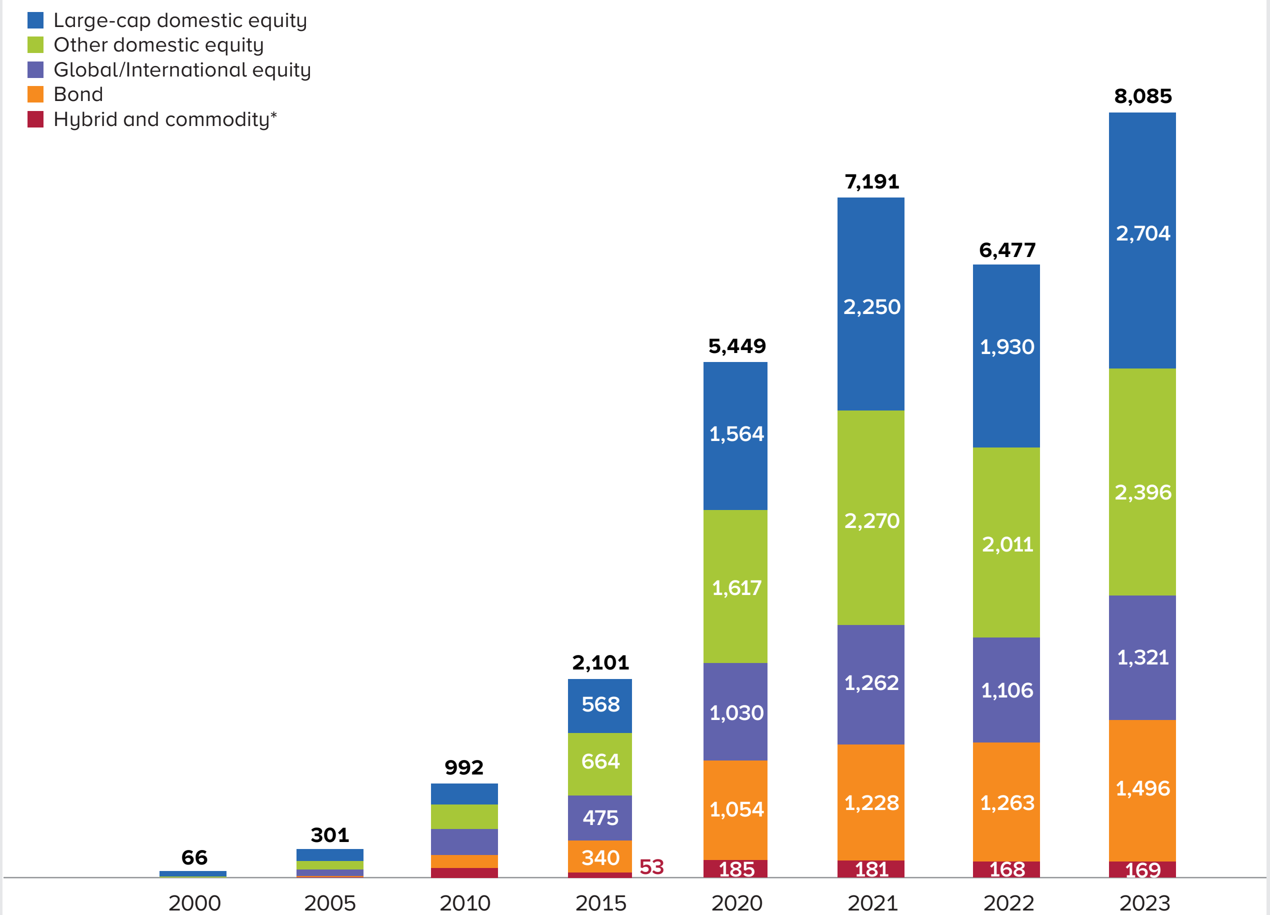
ETFs have proven to be a successful financial innovation among registered investment companies since the first one was created in 1993. The demand for ETFs has grown markedly as both institutional and retail investors have gravitated toward them because of their appealing features. For an introduction to the creation, operation, and evolution of the regulation of ETFs, as well as information about authorized participants (APs) and the key similarities and differences between ETFs and mutual funds, see the ETF resource center, available at www.ici.org/etf.

* Based on ICI calculations of data from the International Investment Funds Association (IIFA).

FIGURE 4.1

Total Net Assets and Number of ETFs Rose in 2023

Billions of dollars, year-end



Number of ETFs

	2000	2005	2010	2015	2020	2021	2022	2023
Number of ETFs	80	204	923	1,597	2,203	2,570	2,847	3,108

* Commodity ETFs include funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

Note: The first bond, hybrid, and commodity ETFs were opened in 2002, 2007, and 2004, respectively.

Secondary Market Trading in ETF Shares

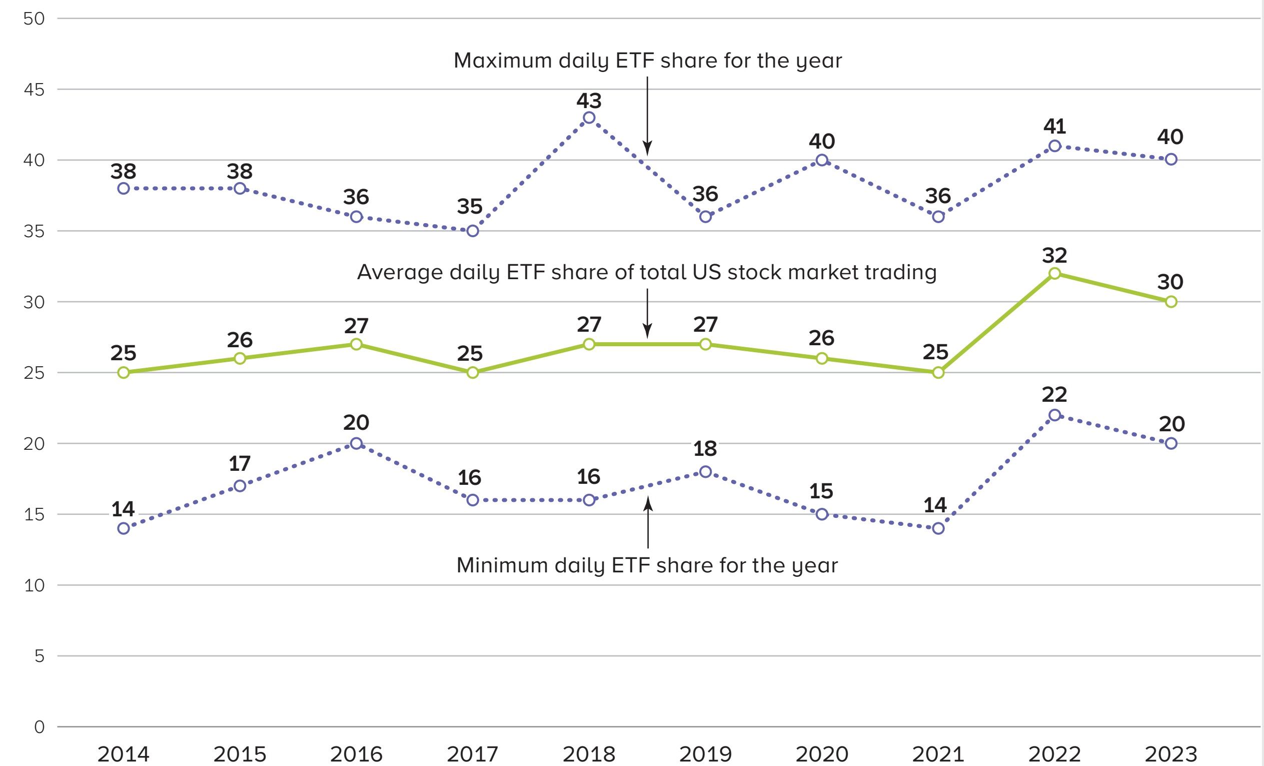
Many investors access ETFs through the secondary market (e.g., on an exchange). Although many large institutional investors can access ETFs in both the primary market (i.e., through creations and redemptions of ETF shares via an AP) and the secondary market, retail investors generally can access them only in the secondary market. ETF investors trading in the secondary market generally are not motivated by arbitrage. They are using ETFs to gain or reduce exposure to specific asset classes or investment strategies, diversify their portfolios, or hedge investment risks. Thus, these funds provide investors with an efficient means to transfer risk. Therefore, it is not surprising that ETF secondary market trading volumes (as measured by the value of shares traded) are a substantial share of total trading on US stock exchanges and other venues. But despite tremendous growth in ETFs in the past decade, their average daily share of total stock market trading had remained relatively flat (Figure 4.2). In 2022, ETFs' share of trading volume somewhat increased to 32 percent, which was likely related to elevated market volatility. This share decreased to 30 percent in 2023 as market volatility abated.

During periods of market turbulence, ETF secondary market trading volumes rise—both in absolute terms and as a share of total stock market trading—as investors, especially institutional investors, turn to ETFs to quickly and efficiently transfer and hedge risks. For example, in late 2018, stock market volatility jumped, largely reflecting market participants' concerns about slowing global growth and intensifying trade tensions. On December 24, 2018, when the S&P 500 index neared bear market territory following its September peak, ETF trading volume accounted for 43 percent of total stock market trading—its highest share in the past decade (Figure 4.2). More recently, the regional banking crisis in March 2023 strained financial markets. During this period, ETF trading volumes' share of total stock market trading rose, peaking at 40 percent on March 10, 2023, the day Silicon Valley Bank was shut down and placed under Federal Deposit Insurance Corporation (FDIC) receivership (the first of several regional banks).

FIGURE 4.2

ETF Secondary Market Trading Averaged 30 Percent of Daily US Stock Trading in 2023

Percentage of total US stock market trading volume, annual



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Date of maximum	Feb 3	Aug 24	Sep 13	Dec 1	Dec 24	Jan 2	Mar 3	Nov 26	Jun 13	Mar 10
Date of minimum	Jun 27	Jun 26	Jul 28	Jun 23	Jun 22	Nov 26	Dec 18	Jun 25	Dec 16	Sep 15

Sources: Investment Company Institute, Bloomberg, Refinitiv, and Cboe Exchange, Inc.

Across all ETFs, most activity is conducted in the secondary market (trading ETF shares) rather than the primary market (creations and redemptions of ETF shares through an AP). On average, 84 percent of the total activity in ETFs occurred on the secondary market in 2023. Even for ETFs focused on narrower asset classes—such as emerging market equity, domestic high-yield bond, and emerging market bond—the bulk of the trading occurred on the secondary market (95 percent, 83 percent, and 85 percent, respectively).*

Most ETF secondary market trades represent investors exchanging shares of ETFs among themselves. Unlike primary market activity, these trades do not affect the ETF's underlying securities. In 2023, domestic equity ETFs had a total of $4.9 trillion in primary market activity, which represented only 5.5 percent of the $90.6 trillion traded in company stocks during the year (Figure 4.3). Even in years with significant market volatility, such as 2018, 2020, and 2022, creations and redemptions of domestic equity ETFs accounted for only a modest share of trading in company stocks.

FIGURE 4.3

Domestic Equity ETFs Have Had Minimal Impact on Underlying US Stocks
Annual

	Domestic equity ETF primary market activity* Trillions of dollars	Value of company stock traded Trillions of dollars	Domestic equity ETF primary market activity as a share of company stock traded Percent
2014	$2.3	$48.7	4.6%
2015	2.5	51.3	4.9
2016	2.2	49.7	4.4
2017	2.2	51.3	4.2
2018	3.5	65.1	5.4
2019	2.9	59.4	5.0
2020	4.2	88.9	4.7
2021	4.9	106.3	4.6
2022	5.2	97.2	5.3
2023	4.9	90.6	5.5

* Primary market activity is measured as the total of gross issuance and gross redemptions.
Sources: Investment Company Institute, Bloomberg, Refinitiv, and Cboe Exchange, Inc.

* Based on ICI calculations of data from ICI and Refinitiv.

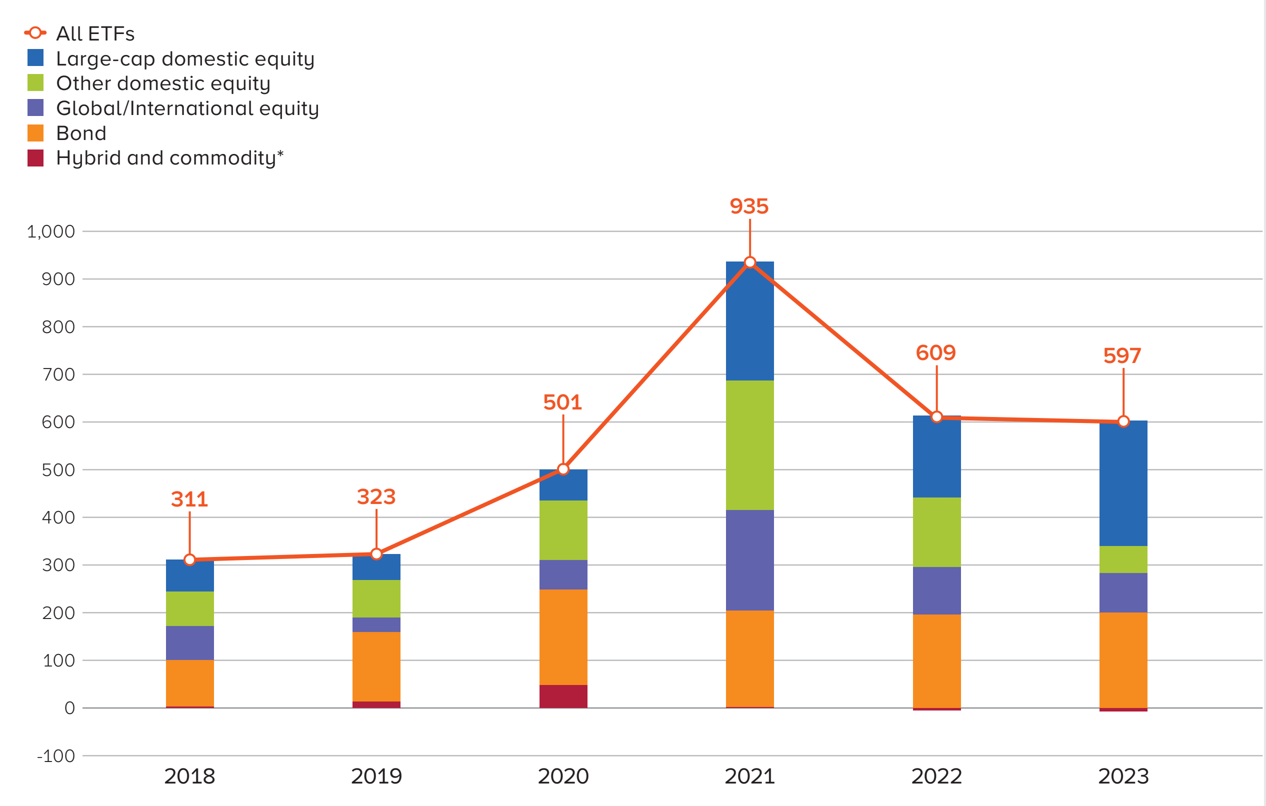
Demand for ETFs

In recent years, demand for ETFs has grown as institutional investors have found ETFs to be a convenient vehicle for participating in, or hedging against, broad movements in the stock market and financial advisers have invested more of their retail clients' assets in ETFs (see Figure 3.10). Net issuance of ETF shares (including reinvested dividends) was $597 billion in 2023 compared with $609 billion in 2022 (Figure 4.4).

FIGURE 4.4

Net Share Issuance of ETFs Declined Slightly in 2023

Billions of dollars, annual



* Commodity ETFs include funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

Note: Data for net share issuance include reinvested dividends.

In 2023, net issuance of domestic equity ETFs was $319 billion, and net issuance of global/international equity ETFs was $83 billion. The higher demand for domestic equity ETFs likely reflected the stronger performance of US stocks in 2023 (26 percent*) compared with international stocks (13 percent†).

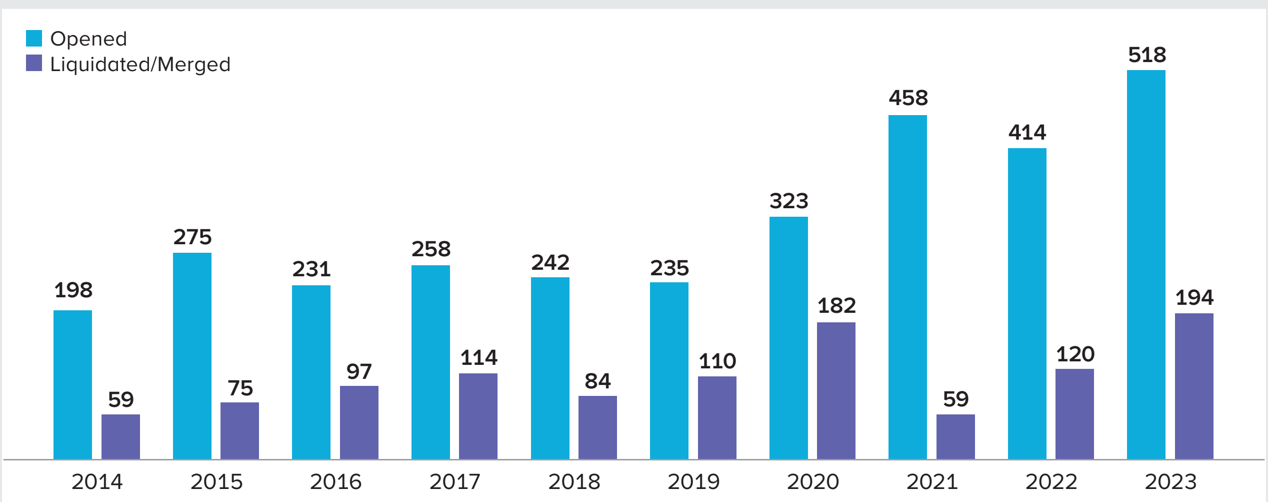
Despite gains of 6 percent (including interest income) on US bonds in 2023‡—a sharp reversal from the losses of 12 percent in 2022—demand for bond ETFs remained fairly steady, with net issuance totaling $201 billion in 2023 versus $197 billion in 2022. In 2023, net issuance of bond ETFs was concentrated in intermediate-duration funds—an estimated 60 percent of the bond ETF net issuance went to funds with durations between four and eight years.§

In recent years, some of the net share issuance represents mutual funds converting to ETFs. From the beginning of 2021 through 2023, 73 mutual funds, which held $96.3 billion in total net assets at the time of conversion, have converted to ETFs. These conversions represented only 4.5 percent of ETFs' net issuance ($2.1 trillion) over the same period.

Strong investor demand for ETFs has led to a substantial increase in the number of ETFs created by fund sponsors, with 3,152 new ETFs offered to investors in the past decade (Figure 4.5). Over the same period, 1,094 ETFs were liquidated or merged with another fund. In any given year, fund sponsors will liquidate or merge ETFs that have failed to attract sufficient demand. In 2023, 518 ETFs—mostly equity ETFs—were launched. Meanwhile, 194 ETFs were liquidated or merged as sponsors eliminated some global/international equity ETFs and sector equity ETFs from their lineups.

FIGURE 4.5

Number of ETFs Entering and Exiting the Industry



Note: Data include ETFs that invest primarily in other ETFs.

* As measured by the Wilshire 5000 Index.

† As measured by the MSCI ACWI Ex USA Index (expressed in US dollars).

‡ As measured by the S&P US Aggregate Bond Index.

§ Based on ICI calculations of data from Morningstar Direct.

Characteristics of ETF-Owning Households

About 12 percent of US households (15.2 million) held ETFs in 2023 (see Figure 7.1). Of households that owned mutual funds, 19 percent also owned ETFs. ETF-owning households tended to include investors who owned a range of equity and fixed-income investments.

Some characteristics of ETF-owning households are similar to those of households that own mutual funds and those that own stocks directly. For instance, households that owned ETFs—like households owning mutual funds and those owning individual stocks—tended to have household incomes above the national median (Figure 4.6).

ETF-owning households also exhibit certain characteristics that distinguish them from other households. For example, ETF-owning households tended to be more likely to own individual retirement accounts (IRAs) than households that own mutual funds or those that own individual stocks. Additionally, Millennials and Generation Z represented a larger share of ETF-owning households (39 percent) than mutual fund–owning households (30 percent).

ETF-owning households also indicated they were more willing to take investment risk. In 2023, 48 percent of ETF-owning households were willing to take substantial or above-average investment risk compared with 22 percent of all US households and 30 percent of mutual fund–owning households (Figure 4.6). This result aligns with the predominance of equity ETFs, which make up 79 percent of ETF total net assets. Investors who are more willing to take investment risk are more likely to invest in equities. Indeed, 95 percent of ETF-owning households owned equity ETFs compared with 79 percent of mutual fund–owning households owning equity mutual funds.

In 2023, the vast majority of ETF-owning households reported that they invest in ETFs for diversification and their cost-effectiveness. Also, 77 percent of ETF-owning households indicated that they invest in ETFs to save for retirement (compared with 90 percent of households owning mutual funds that indicated they use mutual funds to save for retirement).

FIGURE 4.6

Characteristics of ETF-Owning Households

2023

	All US households	Households owning ETFs	Households owning mutual funds	Households owning individual stocks
Median				
Age of household survey respondent	52	50	54	54
Household income[1]	$74,000	$125,000	$100,000	$125,000
Household financial assets[2]	$87,500	$405,000	$225,000	$375,000
Percentage of households				
Household survey respondent				
Married or living with a partner	63	69	71	73
College or postgraduate degree	40	69	54	60
Employed (full- or part-time)	58	65	64	61
Retired from lifetime occupation	33	33	35	37
Household owns				
IRA(s)	42	80	66	70
DC retirement plan account(s)	59	77	82	77
Household's willingness to take financial risk				
Substantial risk for substantial gain	5	9	5	7
Above-average risk for above-average gain	17	39	25	30
Average risk for average gain	39	41	50	47
Below-average risk for below-average gain	12	9	12	10
Unwilling to take any risk	27	2	8	6

1 Total reported is household income before taxes in 2022.

2 Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.