CHAPTER

1

# Worldwide Regulated Open-End Funds

Investors around the world have historically demonstrated strong demand for regulated open-end funds (referred to in this chapter as regulated funds). In the past decade, worldwide net sales of regulated funds have totaled \$18.8 trillion, and fund providers have expanded the vast array of choices, offering investors more than 137,000 regulated funds. However, demand for regulated funds weakened considerably in 2022—several macroeconomic and geopolitical events contributed to a sharp decrease in net sales and a 15 percent decline in total net assets. By year-end 2022, regulated funds managed \$60.1 trillion in total net assets.

## IN THIS CHAPTER

## What Are Regulated Funds?

The International Investment Funds Association (IIFA) defines regulated funds as collective investment pools that are substantively regulated, open-end investment funds.* Open-end funds generally are defined as those that issue new fund shares (or units) and redeem existing shares (or units) on demand. Such funds are typically regulated with respect to disclosure; the form of organization (for example, as either corporations or trusts); custody of fund assets; minimum capital; valuation of fund assets; and restrictions on fund investments (such as limits on leverage, types of eligible investments, and diversification of portfolio investments).

In the United States, however, regulated funds include not only open-end funds (mutual funds and exchange-traded funds [ETFs]), but also unit investment trusts and closed-end funds.† In Europe, regulated funds include Undertakings for Collective Investment in Transferable Securities (UCITS)—ETFs, money market funds, and other categories of similarly regulated funds—and alternative investment funds, commonly known as AIFs.

In many countries, regulated funds may also include institutional funds (funds that are restricted to being sold to a limited number of non-retail investors), funds that offer guarantees or protection of principal (those that offer a formal, legally binding guarantee of income or capital), and open-end real estate funds (funds that invest directly in real estate to a substantive degree).

At year-end 2022, fund providers globally offered 137,892 regulated funds (Figure 1.1). Europe had the largest number of regulated funds with 44 percent of the total, while equity funds were the most common type of regulated funds (34 percent), followed by balanced/mixed funds (25 percent), which also hold equities in their portfolios.

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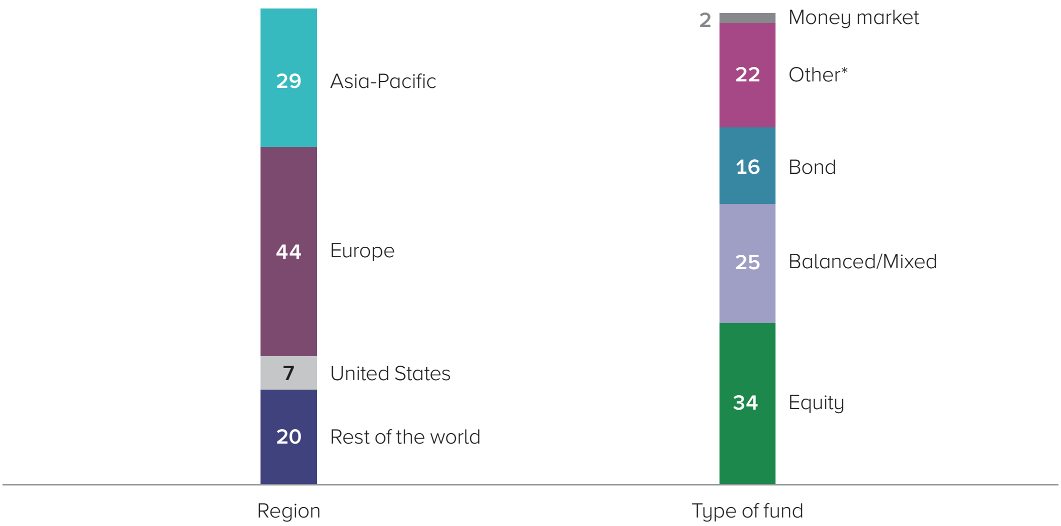
* The primary data source for worldwide regulated funds is the IIFA. In 2022, the IIFA collected data on worldwide regulated funds from 46 jurisdictions. For information on individual jurisdictions, see the statistical data tables available online at **www.icifactbook.org/23-fb-data-tables.html**. For more details about the IIFA data collection, see Worldwide Definitions of Terms and Classifications at **www.ici.org/info/ww_q3_18_definitions.xls**.

† Data for unit investment trusts and closed-end funds are not included in this chapter; these funds are discussed in chapter 2 and chapter 5, respectively.

FIGURE 1.1

### Number of Worldwide Regulated Open-End Funds

Percentage of funds by region or type of fund, year-end 2022




**Number of worldwide regulated open-end funds: 137,892**

* Other funds include guaranteed/protected funds, real estate funds, and other funds.
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

## Worldwide Total Net Assets of Regulated Funds

Total net assets of worldwide regulated funds declined sharply in 2022 after three years of robust growth (Figure 1.2).* Several significant macroeconomic and geopolitical events negatively affected worldwide capital markets in 2022, leading to a substantial decrease in the value of the underlying stocks and bonds held by regulated funds. Along with other concerns that weighed on financial markets, these events included:

- ongoing global supply chain issues;
- Russia's invasion of Ukraine;
- rising inflation in countries around the world; and
- soaring interest rates in various economies as central banks aggressively tightened monetary policy.

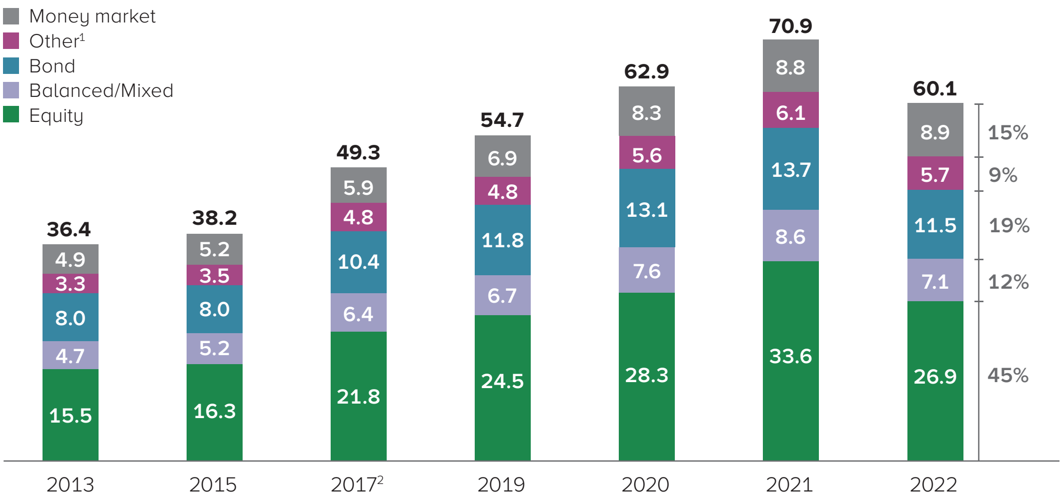
* In this chapter, unless otherwise noted, data for total net assets and net sales are denominated in US dollars.

With stock markets down across the globe in 2022—19 percent in the United States, 15 percent in Europe, and 17 percent in the Asia-Pacific region*—worldwide total net assets of equity funds, which invest primarily in publicly traded stocks, decreased by 20 percent to $26.9 trillion at year-end 2022. Bond funds—which invest primarily in fixed-income securities—saw their total net assets decrease 16 percent over the same period, primarily reflecting capital losses on bonds in the United States and Europe of 12 percent and 14 percent, respectively.† In contrast, net assets of money market funds—which are generally understood to be regulated funds that are restricted to holding short-term, high-quality debt instruments—increased slightly.

FIGURE 1.2

## Total Net Assets of Worldwide Regulated Open-End Funds Declined to $60.1 Trillion in 2022

Trillions of US dollars by type of fund, year-end




**Total number of worldwide regulated open-end funds**

| 2013 | 2015 | 2017 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| 97,371 | 106,060 | 113,226 | 122,561 | 125,701 | 131,793 | 137,892 |

[1] Other funds include guaranteed/protected funds, real estate funds, and other funds.

[2] Data for Russia are for 2017:Q3.

Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.

Source: International Investment Funds Association

* As measured by the Wilshire 5000 Total Market Index, the MSCI Daily Total Return Gross Europe Index, and the MSCI Daily Total Return Gross AC Asia-Pacific Index, which are all expressed in US dollars.

† As measured by the S&P US Aggregate Bond Index and the ICE BofA Euro Corporate Index (expressed in euros), both of which cover investment grade securities.

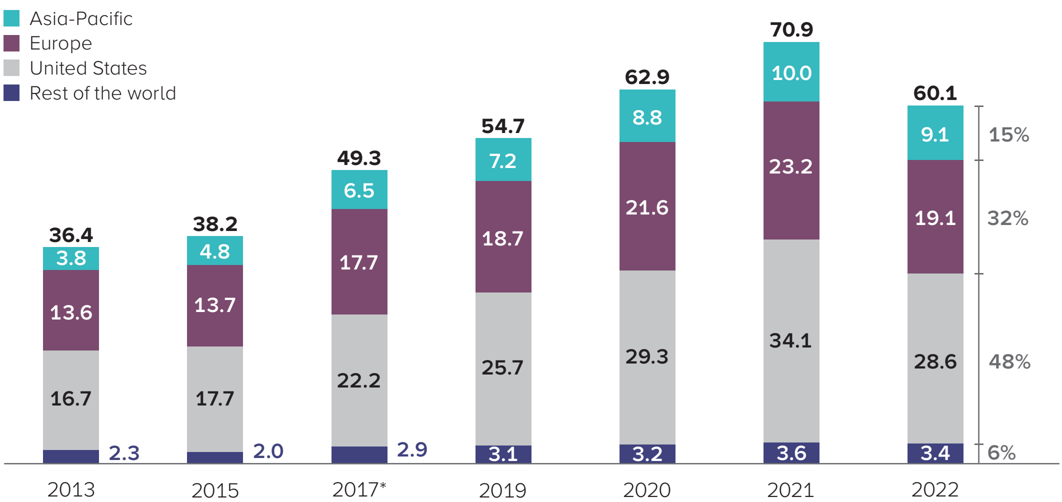
Total net assets of worldwide regulated funds also varied widely by geographic region (Figure 1.3). At year-end 2022, the majority of worldwide total net assets in regulated funds continued to be held in the United States (48 percent) and Europe (32 percent). Strong regulatory frameworks in both jurisdictions have contributed to their success. In recent decades, US regulated funds have been bolstered by their availability as investment options in tax-advantaged accounts, such as 401(k) plans. Meanwhile, the UCITS framework has many provisions that allow for the pooling of assets. These include passporting (i.e., a UCITS established in one country can be sold cross-border into one or more other European countries), the availability of UCITS in countries outside of Europe, and allowing different share classes to be denominated in a range of different currencies or adapted to different tax structures.

Regulated funds in the Asia-Pacific region held another 15 percent of worldwide total net assets. Given the size of the population, the rapidly increasing economic development and wealth in many countries, and efforts to promote individual account-based saving and investing, the region's regulated fund market has the potential for continued growth.

FIGURE 1.3

## The United States Has the Largest Share of Total Net Assets of Worldwide Regulated Open-End Funds

Trillions of US dollars by region, year-end




* Data for Russia are for 2017:Q3.

Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.

Source: International Investment Funds Association

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**Worldwide Regulated Open-End Fund Assets and Flows**

www.ici.org/research/stats/worldwide

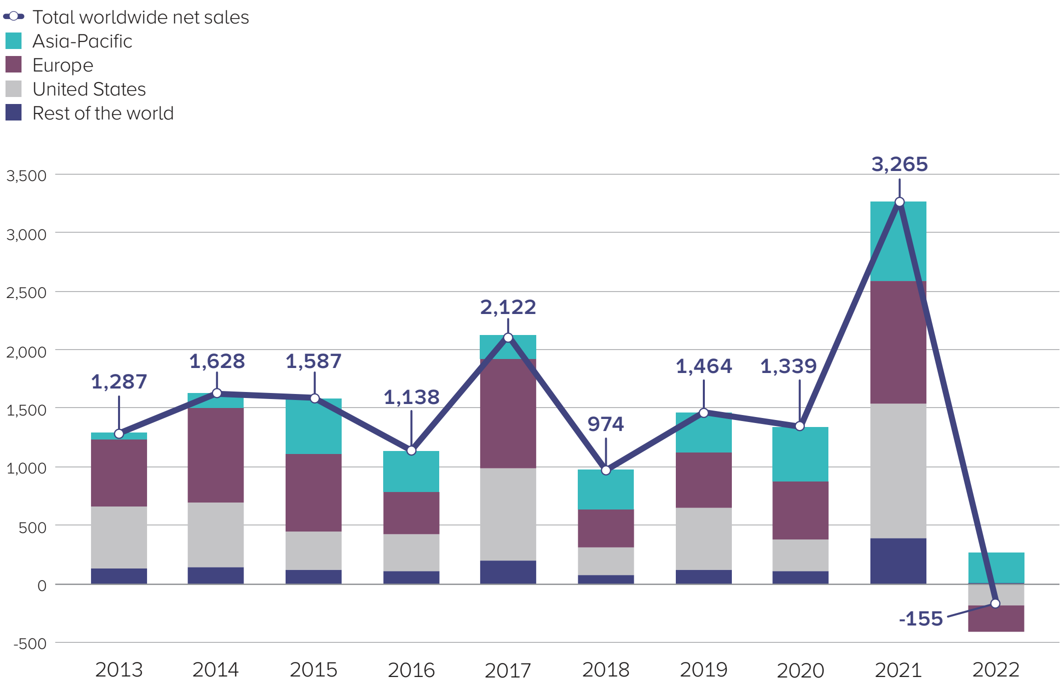
## Worldwide Net Sales of Regulated Long-Term Funds

Worldwide demand for regulated long-term funds (equity, bond, balanced/mixed, and other) dropped sharply in 2022, from record net sales of $3.3 trillion in 2021 to net redemptions of $155 billion in 2022 (Figure 1.4). However, the aggregate data masks different regional experiences. While regulated long-term funds in both the United States and Europe experienced net outflows for the first time in more than a decade ($191 billion and $225 billion, respectively), regulated long-term funds in the Asia-Pacific region and the rest of the world continued to experience net inflows, with flows in the Asia-Pacific region driven largely by inflows in China and Japan.

FIGURE 1.4

### Net Sales of Regulated Open-End Long-Term Funds Decreased in 2022

Billions of US dollars by region, annual




Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds. Long-term funds include equity funds, balanced/mixed funds, bond funds, and other funds (guaranteed/protected, real estate, and other funds), but exclude money market funds.

Source: International Investment Funds Association

Worldwide net sales of regulated long-term funds declined significantly across all fund categories in 2022 when compared with 2021. For example, worldwide net sales of equity funds decreased from net inflows of $1.1 trillion in 2021 to net outflows of $4 billion in 2022 (Figure 1.5). The substantial slowdown in net sales was likely associated with the negative returns on global stocks, as net flows to equity funds have historically been related to world equity returns.

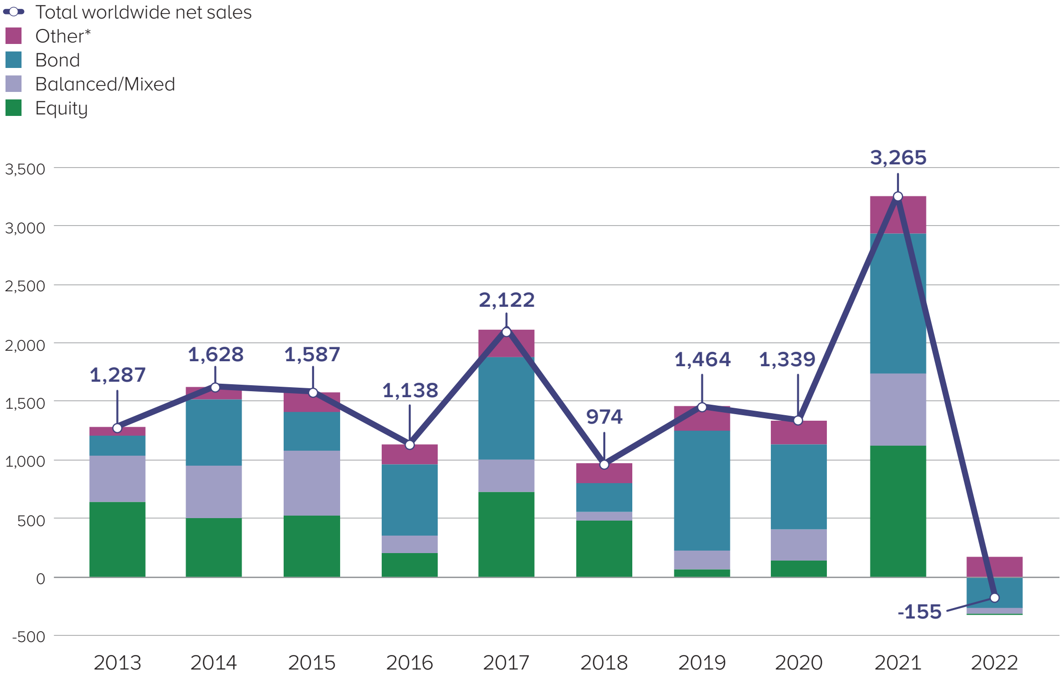
Bond funds also experienced a major shift in net sales, going from net inflows of $1.2 trillion in 2021 to net outflows of $261 billion in 2022 (Figure 1.5). This reversal was primarily driven by developments in inflation and interest rates. Inflation across the globe rose considerably during 2022—reaching 40-year highs in many countries—powered mainly by an increase in the prices of energy and goods, which later broadened out to food and core services. In response, central banks tightened monetary policy by engaging in earlier and steeper-than-expected interest rate hikes. For example, in 2022, the European Central Bank raised official rates 2.50 percentage points over four separate hikes, while the Bank of England raised rates 3.25 percentage points over eight hikes. In the United States, the Federal Reserve was even more aggressive and raised the benchmark interest rate by 4.25 percentage points over seven rate increases. The Riksbank, Norges Bank, and Swiss National Bank also raised interest rates in 2022 to help curb inflation.

The cycle of tightening monetary policy among these developed economies is important because when interest rates rise, bond prices fall. This caused the value of bonds in these jurisdictions to decrease, which led to capital losses on bond funds. Like the experience with equity fund returns and flows, net flows to bond funds have historically been related to bond returns (see Figure 3.5).

FIGURE 1.5

## Worldwide Net Sales of Regulated Open-End Long-Term Funds Decreased Across All Asset Classes in 2022

Billions of US dollars by type of fund, annual




* Other funds include guaranteed/protected funds, real estate funds, and other funds.
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

## Ongoing Charges for UCITS in the European Union

The UCITS Directive has become a global success story since its adoption in 1985, with net assets of €9.9 trillion in EU-domiciled UCITS at year-end 2022. Investments in these funds are held by investors in Europe and other jurisdictions worldwide. In recent years, there has been renewed interest in the costs and charges paid by shareholders of investment funds. In 2019, the European Securities and Markets Authority (ESMA) issued its first annual report on the costs and charges of retail investment products in the European Union following a mandate by the European Commission. ESMA has since published other reports related to costs and charges. For example, in January 2021, ESMA launched a Common Supervisory Action (CSA) in conjunction with European national regulators on the supervision of fees and costs of UCITS. In May 2022, ESMA released a report outlining the results of this exercise.*

Like regulated fund investors in other countries, UCITS investors incur ongoing charges that cover the provision of services, including portfolio management, administration, compliance, accounting, legal, and distribution. The total cost of these charges is disclosed to investors through either the total expense ratio (TER), often found in a UCITS' annual report and other marketing documents, or the ongoing charges figure (OCF), found in the Key Investor Information Document (KIID).

Average ongoing charges of equity and fixed-income UCITS continued their downward trend in 2021 (Figure 1.6). Since 2013, asset-weighted average ongoing charges for equity and fixed-income UCITS have declined 19 percent and 31 percent, respectively. In 2021, the asset-weighted average ongoing charge for equity funds fell to 1.21 percent from 1.24 percent in 2020. In other words, for every €100 invested in 2021, fund shareholders were charged €1.21 in ongoing fees. Additionally, the asset-weighted average ongoing charges for equity and fixed-income funds were below their respective simple averages, which indicates that investors tend to concentrate their assets in lower-cost funds.

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* European Securities and Markets Authority, "Final Report on the 2021 CSA on costs and fees." Available at **www.esma.europa.eu/sites/default/files/library/esma34-45-1673_final_report_on_the_2021_csa_on_costs_and_fees.pdf**.

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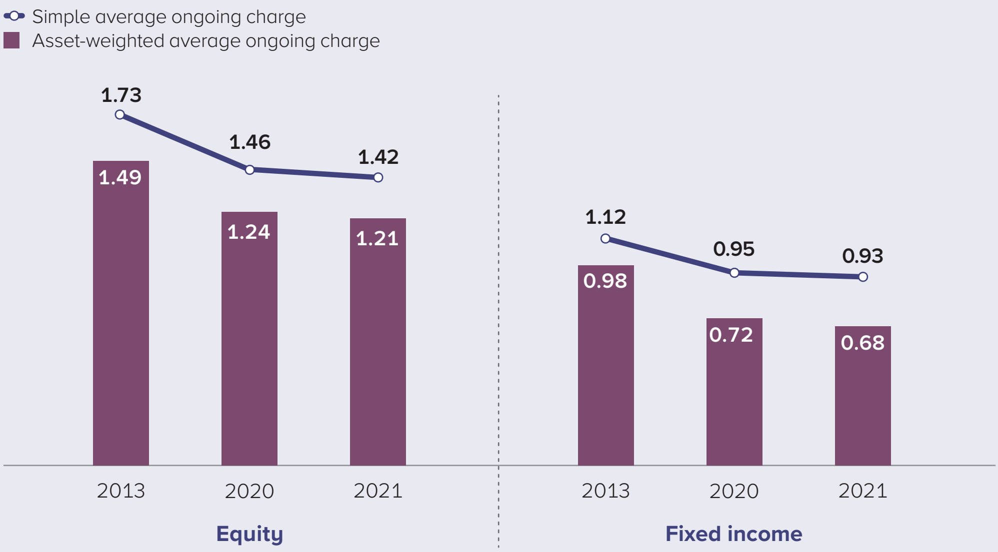
FIGURE 1.6

## Investors in UCITS Pay Below-Average Ongoing Charges

Percent




Note: Data exclude ETFs.

Source: Investment Company Institute calculations of Morningstar Direct data. See *ICI Research Perspective*, "Ongoing Charges for UCITS in the European Union, 2021."

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**Ongoing Charges for UCITS in the European Union, 2021**
www.ici.org/files/2022/per28-08.pdf

## Worldwide Net Sales of Money Market Funds

Worldwide net sales of money market funds totaled $171 billion in 2022, down from $673 billion in 2021 (Figure 1.7). The decline in worldwide demand for money market funds was largely driven by a decrease in net sales in the United States and the Asia-Pacific region. Investor demand for money market funds in the United States decreased from $424 billion in 2021 to $10 billion in 2022; and in the Asia-Pacific region, money market funds experienced net inflows of $132 billion in 2022, down from $254 billion in 2021.

Investors use money market funds because they are professionally managed, tightly regulated vehicles with holdings limited to high-quality, short-term debt instruments. As such, they are highly liquid, attractive, cash-like alternatives to bank deposits. Generally, demand for money market funds is dependent upon their yields and interest rate risk exposure relative to other high-quality fixed-income securities.

In the United States, net sales of money market funds fell as purchases by retail investors were offset by redemptions from institutional investors (see Figure 3.14). In 2022, short-term interest rates ramped up quickly in the United States, and in the second half of 2022, were higher than longer-dated fixed-income securities. US retail investors were particularly attracted to the relatively high yields and extremely low interest rate risk offered by money market funds, especially in light of the double-digit capital losses seen in stock and bond markets.

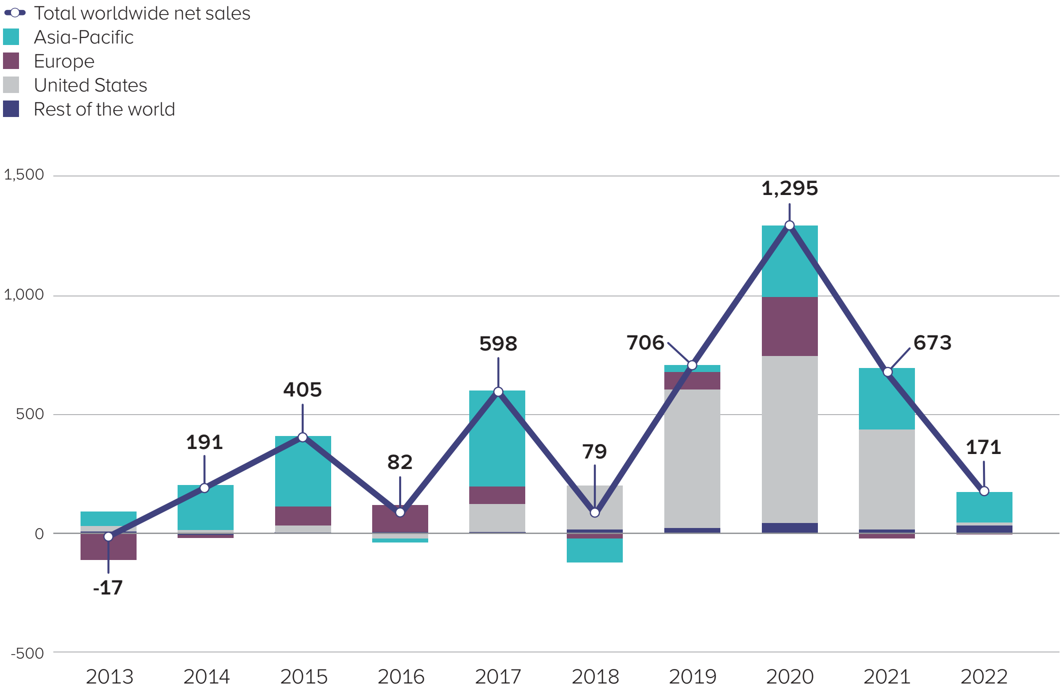
By contrast, US institutional investors, on net, redeemed cash from money market funds. This development is consistent with historical patterns in institutional money market fund flows during a monetary policy tightening cycle. Because of their size and investment knowledge, some institutional investors can easily invest directly in short-term instruments. This allows those institutional investors to capture higher yields immediately when the Federal Reserve raises the federal funds rate rather than waiting for the yield in a money market fund to catch up as older, lower-yielding short-term securities mature and are replaced with newer, higher-yielding paper.

Demand for money market funds in the Asia-Pacific region is dominated by Chinese money market funds, which hold the bulk of money market fund total net assets in the region. The People's Bank of China lowered interest rates in the summer of 2022, as China's economy was affected by the government's zero-COVID policy. As a result, net inflows into money market funds in the Asia-Pacific region in the first half of 2022 turned to net outflows, lowering the overall net sales of money market funds in the region for the year.

FIGURE 1.7

## Worldwide Net Sales of Money Market Funds Decreased in 2022

Billions of US dollars by region, annual




Source: International Investment Funds Association

## Size of Worldwide Regulated Funds in Global Capital Markets

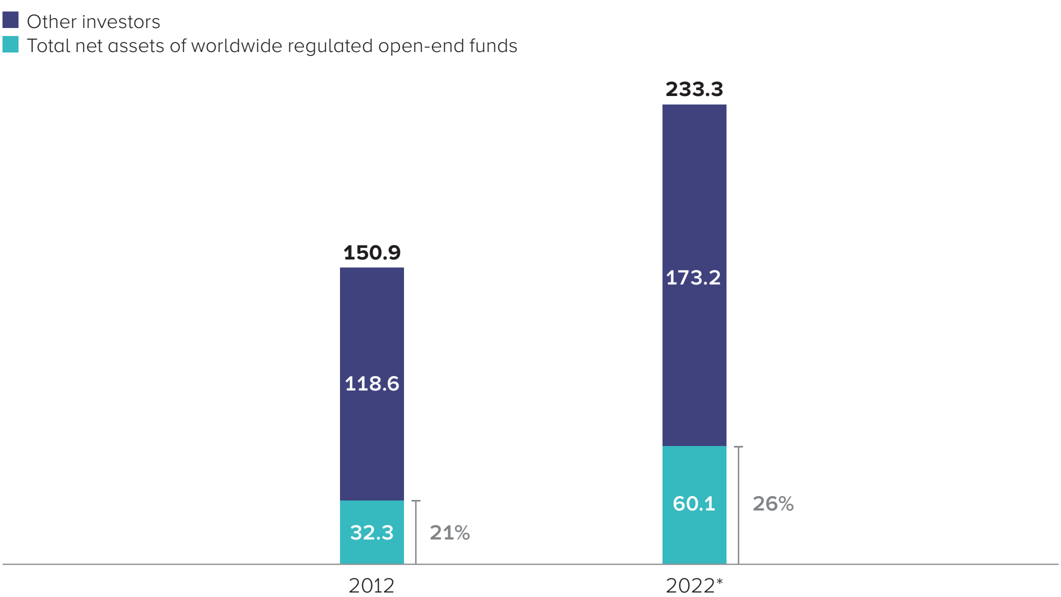
Regulated funds continue to be an important conduit for allocating capital globally, helping finance businesses, governments, and household activities. As of year-end 2022, worldwide capital markets, as measured by the value of equity and debt securities outstanding, totaled $233.3 trillion, with regulated funds holding 26 percent, or $60.1 trillion (Figure 1.8).

The share of worldwide capital markets held by regulated funds has grown somewhat over the past decade. In 2022, worldwide regulated funds held 26 percent of worldwide capital markets, compared with 21 percent in 2012 (Figure 1.8). A wide range of other investors—such as central banks, sovereign wealth funds, pension plans (both defined benefit and defined contribution), banks, insurance companies, hedge funds, broker-dealers, and households owning stocks and bonds directly—held the remaining 74 percent in 2022.

FIGURE 1.8

### Worldwide Regulated Funds Held 26 Percent of Worldwide Equity and Debt Markets

Trillions of US dollars, year-end




* Data for worldwide debt markets are as of September 30, 2022.

Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.

Source: Investment Company Institute calculations of data from the International Investment Funds Association, World Federation of Exchanges, and Bank for International Settlements

## Fund Ownership in Market-Based Versus Bank-Based Economies

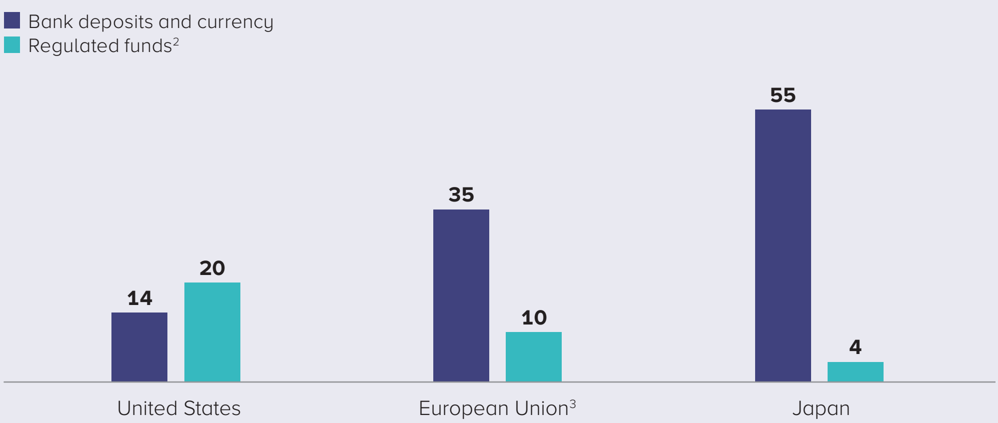
Generally speaking, a jurisdiction's financial system can be described as either market-based or bank-based, depending on how its economy deploys savings and raises capital for the production of goods and services. For example, many jurisdictions within the European Union are considered bank-based economies, since banks are more often used to mobilize investor savings and allocate capital. Conversely, the United States is usually considered a market-based economy, since capital markets are the main conduit for investor savings and deploying capital. The structure of capital allocation in an economy is a factor that can influence the demand for regulated funds, and regulated funds tend to make up a greater share of household wealth in market-based economies.

In the European Union and Japan, where investors have traditionally allocated savings and capital to banks, households hold more of their financial wealth in bank products. European and Japanese households hold 35 percent and 55 percent, respectively, of their financial wealth in bank products, with relatively little in regulated funds (Figure 1.9). By comparison, households in the United States hold a much lower share of their financial wealth in bank products and a much larger share in regulated funds.

FIGURE 1.9

### US Households Hold More of Their Wealth in Regulated Funds; Bank-Based Countries Have a Lower Share

Percentage of household[1] financial wealth, year-end 2022




[1] Households include households and nonprofit institutions serving households.

[2] For the United States, regulated funds include total net assets held by mutual funds and ETFs. For the European Union and Japan, regulated funds include investment fund shares as defined by their respective systems of national accounts.

[3] Data for Poland are as of 2022:Q3.

Sources: Investment Company Institute, Federal Reserve Board, Eurostat, and Bank of Japan