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Amundi Climate Transition Core Bond Fund

Class A Shares	Class C Shares	Class K Shares	Class Y Shares
CTBAX	ACTCX	ACTKX	CTCYX

Summary Prospectus | December 1, 2023

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus, statement of additional information, reports to shareholders, and other information about the fund online at <https://www.amundi.com/usinvestors/Resources/Download-Literature>. You also can obtain this information at no cost by calling 1-800-225-6292 or by sending an email request to US.AskAmundiUS@amundi.com. The fund's current prospectus and statement of additional information, dated December 1, 2023, and the independent registered public accounting firm's report and financial statements in the fund's annual report to shareholders dated July 31, 2023, are incorporated by reference into this summary prospectus.

Summary Prospectus

Investment objective

A combination of income and capital appreciation.

Fees and expenses of the fund

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.**

You may qualify for sales charge discounts if you or your family invest, or agree to invest in the future, at least \$100,000 in Class A shares of the Pioneer funds. More information about these and other discounts is available from your investment professional and in the “Sales charges” section of the prospectus beginning on page 74, the “Intermediary defined sales charge waiver policies” section of the prospectus beginning on page 111, and the “Sales charges” section of the statement of additional information beginning on page 65. If you invest in Class K shares or Class Y shares through an investment professional or financial intermediary, that investment professional or financial intermediary may charge you a commission. Such commissions, if any, are not charged by the fund and are not reflected in the fee table or expense example below.

Shareowner fees

(fees paid directly from your investment)

	Class A	Class C	Class K	Class Y
Maximum sales charge (load) when you buy shares (as a percentage of offering price)	4.50%	None	None	None
Maximum deferred sales charge (load) (as a percentage of offering price or the amount you receive when you sell shares, whichever is less)	None ¹	1%	None	None

Annual fund operating expenses

(expenses that you pay each year as a percentage of the value of your investment)

	Class A	Class C	Class K	Class Y
Management Fees	0.35%	0.35%	0.35%	0.35%
Distribution and Service (12b-1) Fees	0.25%	1.00%	0.00%	0.00%
Other Expenses	1.96%	1.96%	1.96%	1.96%
Acquired Fund Fees and Expenses ²	0.01%	0.01%	0.01%	0.01%
Total Annual Fund Operating Expenses Plus Acquired Fund Fees and Expenses ²	2.57%	3.32%	2.32%	2.32%
Less: Fee Waiver and Expense Reimbursement ³	-1.83%	-1.83%	-1.86%	-1.86%
Net Expenses Plus Acquired Fund Fees and Expenses ³	0.74%	1.49%	0.46%	0.46%

- 1 Class A purchases of \$500,000 or more that are not subject to an initial sales charge may be subject to a contingent deferred sales charge of 1%. See "Sales charges."
- 2 Total annual fund operating expenses in the table, before and after fee waivers and expense reimbursements, are higher than the corresponding ratios of expenses to average net assets shown in the "Financial Highlights" section, which do not include acquired fund fees and expenses.
- 3 The fund's investment adviser has contractually agreed to limit ordinary operating expenses (ordinary operating expenses means all fund expenses other than taxes, brokerage commissions, acquired fund fees and expenses, and extraordinary expenses, such as litigation) to the extent required to reduce fund expenses to 0.73%, 1.48%, 0.45% and 0.45% of the average daily net assets attributable to Class A, Class C, Class K and Class Y shares, respectively. These expense limitations are in effect through December 1, 2025. There can be no assurance that the adviser will extend the expense limitations beyond such time. Net expenses for a class may exceed the expense limitation to the extent that the fund incurs excluded expenses. While in effect, the arrangement may be terminated for a class only by agreement of the adviser and the Board of Trustees.

Example

This example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. The example assumes that you invest \$10,000 in the fund for the time periods shown and then, except as indicated,

Summary Prospectus

redeem all of your shares at the end of those periods. It also assumes that (a) your investment has a 5% return each year and (b) the fund's total annual operating expenses remain the same except for year one (which considers the effect of the expense limitation). Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	If you redeem your shares				If you do not redeem your shares			
	Number of years you own your shares							
	1	3	5	10	1	3	5	10
Class A	\$522	\$867	\$1,427	\$2,951	\$522	\$867	\$1,427	\$2,951
Class C	252	667	1,403	3,353	152	667	1,403	3,353
Class K	47	353	888	2,355	47	353	888	2,355
Class Y	47	353	888	2,355	47	353	888	2,355

Portfolio turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or “turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the fund's performance. During the period from December 15, 2022 (commencement of operations) to July 31, 2023, the fund's portfolio turnover rate was 34% of the average value of its portfolio.

Principal investment strategies

The fund's investment approach considers an investment's income and return prospects relative to perceived risk, while also considering its climate-related characteristics. Under normal circumstances, the fund invests at least 80% of its net assets (plus the amount of borrowings, if any, for investment purposes) in fixed income investments that meet the investment adviser's climate transition criteria (the “Climate Transition Criteria”).

The Climate Transition Criteria are designed to identify investments that have climate-positive characteristics consistent with the transition to a more sustainable economy in terms of lower global greenhouse gas emissions, as considered by Amundi Asset Management US, Inc. (“Amundi US” or the “adviser”), the fund's investment adviser. Investments meeting the Climate Transition Criteria include (a) those whose issuers, in the view of the adviser: (1) are participating in, or contributing to, the goal of achieving lower carbon emissions, (2) have developed and are implementing a viable sustainability plan or (3) have low direct carbon

emissions or impact, which may include securities issued by the U.S. government or its agencies; or (b) bonds designed to support the climate transition or other environmental purposes (known as “green bonds”).

Fixed income investments may include instruments and obligations of U.S. and non-U.S. corporate and other non-governmental entities, debt securities issued or guaranteed by the U.S. government, its agencies or instrumentalities or non-U.S. governmental entities, mortgage-related or mortgage-backed securities (including “sub-prime” mortgages), asset-backed securities, floating-rate loans, convertible securities, preferred securities, TIPS and other inflation-linked debt securities, subordinated debt securities, insurance-linked securities, municipal debt securities and securities of other investment companies (including mutual funds, exchange-traded funds and closed-end funds) that invest primarily in fixed income investments. Derivative instruments that provide exposure to fixed income investments or have similar economic characteristics may be treated as fixed income investments under the fund’s 80% policy.

Amundi US considers issuers as participating in, or contributing to, the goal of achieving lower carbon emissions through their current or expected future efforts to reduce or eliminate high carbon producing activities or to transition from high carbon producing activities to lower carbon producing activities, including through: (i) committing to follow third-party validated carbon reduction plans, (ii) publicly expressing credible intentions to reduce carbon emissions, (iii) engaging in significant carbon reduction efforts, including by issuers with higher carbon emissions whose carbon reductions represent a meaningful contribution to global emissions decline, or (iv) employing business models or activities, or providing products or services, that support the reduction of carbon emissions and/or provide other climate-positive benefits. Amundi US bases the consideration of a viable sustainability plan on adherence to third party standards and/or its own review. Amundi US considers whether an issuer has low carbon emissions based primarily on available carbon intensity measures, which consider emissions in relation to economic output.

Amundi US allocates the fund’s investments among different fixed income asset classes (e.g., corporate obligations, mortgage-backed and asset-backed securities, and U.S. government securities) based on its outlook for economic, interest rate and political trends. At any given time, the fund may have a substantial amount of its assets in any one of such segments. The fund may invest in securities of issuers in any market capitalization range, industry or market sector.

Due to Amundi US’s focus on the carbon emissions and climate transition characteristics of issuers for purposes of the Climate Transition Criteria, and the greater relative availability of carbon emissions characteristics for corporate issuers

Summary Prospectus

relative to other issuers, the fund may invest substantially in the debt securities of corporate issuers. Investments also may include green bonds (bonds designed to support climate-related or environmental projects or other purposes). The fund may invest a substantial portion of its assets in mortgage-related securities, including CMBS, CMOs and credit risk transfer securities, and other mortgage-related securities issued by private issuers.

When considering the carbon or other climate-related characteristics of an issuer, or whether an issuer has a viable sustainability plan, Amundi US may use statistics and other available data from independent third parties, such as S&P Global Trucost, MSCI Inc., ISS ESG, CDP, and SBTi. Amundi US believes that this information currently is available more widely and is more reliable for corporate issuers. Amundi US currently does not take into account Scope 3 emissions, which include indirect emissions occurring in an issuer's value chain (for example, purchased goods/services, use of sold products, investments, and leased assets and franchises). Amundi US considers an issuer's carbon characteristics in the context of its sector or industry. Due to the focus on carbon characteristics, the fund will not generally invest in companies significantly involved in the production of thermal coal.

Amundi US may determine that an issuer meets the Climate Transition Criteria even if the issuer does not currently meet or exceed expected targets toward lower carbon emissions, for example if the issuer demonstrates improving carbon emissions or announces a viable sustainability plan. Accordingly, certain investments that meet the Climate Transition Criteria may have relatively high carbon emissions. Over time, Amundi US expects that the fund's portfolio, on an asset-weighted basis, will reflect continued and measurable progress toward lower carbon outcomes.

Amundi US may not take into consideration whether the sponsor of a mortgage-backed or asset-backed security in which the fund invests meets the Climate Transition Criteria. That is because mortgage-backed and asset-backed securities represent interests in pools of underlying assets (e.g., mortgages or loans), and not of the ongoing business enterprise of the sponsor. It is therefore possible that the fund could invest in a mortgage-backed or asset-backed security sponsored by a bank or other financial institution in which the fund would not invest directly.

The fund invests in securities of any maturity and maintains an average portfolio maturity that varies based upon the judgment of Amundi US. The maturity of a fixed income security is a measure of the time remaining until final payment on the security is due. The fund's investments may have fixed or variable principal payments and all types of interest rate payment and reset terms, including fixed

rate, adjustable rate, floating rate, zero coupon, when-issued, delayed delivery, to be announced and forward commitment, contingent, deferred, payment in kind and auction rate features.

Up to 20% of the fund's total assets may be invested in debt securities rated below investment grade at the time of purchase or determined to be of equivalent quality by Amundi US. Up to 25% of the fund's total assets may be invested in debt securities of non-U.S. issuers, including up to 5% of its total assets in debt securities of corporate and governmental issuers in emerging markets. Up to 20% of the fund's net assets may be invested in fixed income and equity investments that do not meet Amundi US's Climate Transition Criteria.

Amundi US considers both broad economic and issuer specific factors in selecting a portfolio designed to achieve the fund's investment objective, as well as an issuer's climate and carbon characteristics as described above. In assessing the appropriate maturity, rating, sector and country weightings of the portfolio, Amundi US considers a variety of factors that are expected to influence economic activity and interest rates. These factors include fundamental economic indicators, such as the rates of economic growth and inflation, Federal Reserve monetary policy and the relative value of the U.S. dollar compared to other currencies. Once Amundi US determines the preferable portfolio characteristics, Amundi US selects individual securities based upon the terms of the securities (such as yields compared to U.S. Treasuries or comparable issuers), liquidity and rating, sector and issuer diversification. Amundi US also employs fundamental research to assess an issuer's credit quality, taking into account financial condition and profitability, future capital needs, potential for change in rating, industry outlook, the competitive environment and management ability. In making these portfolio decisions, Amundi US relies on the knowledge, experience and judgment of its staff and the staff of its affiliates who have access to a wide variety of research.

Amundi US integrates environmental, social and corporate governance (ESG) considerations into its investment research process by evaluating the business models and practices of issuers and their ESG-related risks. Amundi US believes ESG analysis is a meaningful facet of fundamental research, the process of evaluating an issuer based on its financial position, business operations, competitive standing and management. This process considers ESG information, where available, in assessing an investment's performance potential. Amundi US generally considers ESG information in the context of an issuer's respective sector or industry. Amundi US may consider ESG ratings provided by third parties or internal sources, as well as issuer disclosures and public information, in evaluating issuers. Apart from climate and carbon considerations, ESG considerations are not a primary focus of

Summary Prospectus

the fund, and the weight given by the adviser to ESG considerations in making investment decisions will vary and, for any specific decision, they may be given little or no weight.

In addition to the fund's 80% policy, the adviser generally will not invest fund assets in (i) companies that the adviser determines have significant involvement in the manufacturing of complete tobacco products, (ii) companies engaged in the production, sale, storage of, or providing services for, certain controversial weapons, including chemical, biological and depleted uranium weapons and certain antipersonnel mines and cluster bombs, (iii) companies developing or planning to develop new thermal coal capacities, companies generating more than 20% of their revenue from thermal coal mining extraction, companies with annual thermal coal extraction of 70MT or more without intention to reduce, or companies with revenue in thermal coal mining extraction and thermal coal power generation that exceeds 50% of their revenue, or (iv) issuers that violate, repeatedly and seriously, one or more of the ten principles of the UN Global Compact, without credible corrective action.

Principal risks of investing in the fund

You could lose money on your investment in the fund. As with any mutual fund, there is no guarantee that the fund will achieve its objective.

Market risk. The market prices of securities or other assets held by the fund may go up or down, sometimes rapidly or unpredictably, due to general market conditions, such as real or perceived adverse economic, political, or regulatory conditions, political instability, recessions, inflation, changes in interest or currency rates, lack of liquidity in the bond markets, the spread of infectious illness or other public health issues, weather or climate crisis, armed conflict, market disruptions caused by tariffs, trade disputes, sanctions or other government actions, or other factors or adverse investor sentiment. If the market prices of the fund's securities and assets fall, the value of your investment will go down. A change in financial condition or other event affecting a single issuer or market may adversely impact securities markets as a whole.

In the past decade, financial markets throughout the world have experienced increased volatility, depressed valuations, decreased liquidity and heightened uncertainty. Governmental and non-governmental issuers have defaulted on, or been forced to restructure, their debts. These conditions may continue, recur, worsen or spread. Events that have contributed to these market conditions include, but are not limited to, major cybersecurity events; geopolitical events (including wars, terror attacks and economic sanctions); measures to address budget deficits;

downgrading of sovereign debt; changes in oil and commodity prices; dramatic changes in currency exchange rates; global pandemics; and public sentiment. The long-term impact of the COVID-19 pandemic and its subsequent variants on economies, markets, industries and individual issuers, are not known. Some sectors of the economy and individual issuers have experienced or may experience particularly large losses. Periods of extreme volatility in the financial markets; reduced liquidity of many instruments; and disruptions to supply chains, consumer demand and employee availability, may continue for some time.

Raising the ceiling on U.S. government debt has become increasingly politicized. Any failure to increase the total amount that the U.S. government is authorized to borrow could lead to a default on U.S. government obligations, with unpredictable consequences for economies and markets in the U.S. and elsewhere. Inflation and interest rates have increased and may rise further. These circumstances could adversely affect the value and liquidity of the fund's investments, impair the fund's ability to satisfy redemption requests, and negatively impact the fund's performance. In addition, inflation, rising interest rates, global supply chain disruptions and other market events could adversely affect the companies or issuers in which the fund invests. Following Russia's invasion of Ukraine, Russian securities lost all, or nearly all, their market value. Other securities or markets could be similarly affected by past or future political, geopolitical or other events or conditions.

Governments and central banks, including the U.S. Federal Reserve, have taken extraordinary and unprecedented actions to support local and global economies and the financial markets. These actions have resulted in significant expansion of public debt, including in the U.S. The consequences of high public debt, including its future impact on the economy and securities markets, may not be known for some time. U.S. Federal Reserve or other U.S. or non-U.S. governmental or central bank actions, including increases or decreases in interest rates, or contrary actions by different governments, could negatively affect financial markets generally, increase market volatility and reduce the value and liquidity of securities in which the fund invests. Policy and legislative changes in the U.S. and in other countries are affecting many aspects of financial regulation, and these and other events affecting global markets, such as the United Kingdom's exit from the European Union (or Brexit), potential trade imbalances with China or other countries or sanctions or other government actions against Russia, other nations or individuals or companies (or their countermeasures), may contribute to decreased liquidity and increased volatility in the financial markets. The impact of these changes on the markets, and the implications for market participants, may not be fully known for some time.

Summary Prospectus

The U.S. and other countries are periodically involved in disputes over trade and other matters, which may result in tariffs, investment restrictions and adverse impacts on affected companies and securities. For example, the U.S. has imposed tariffs and other trade barriers on Chinese exports, has restricted sales of certain categories of goods to China, and has established barriers to investments in China. Trade disputes may adversely affect the economies of the U.S. and its trading partners, as well as companies directly or indirectly affected and financial markets generally. The U.S. government has prohibited U.S. persons, such as the fund, from investing in Chinese companies designated as related to the Chinese military. These and possible future restrictions could limit the fund's opportunities for investment and require the sale of securities at a loss or make them illiquid. Moreover, the Chinese government is involved in a longstanding dispute with Taiwan that has included threats of invasion. If the political climate between the U.S. and China does not improve or continues to deteriorate, if China were to attempt unification of Taiwan by force, or if other geopolitical conflicts develop or get worse, economies, markets and individual securities may be severely affected both regionally and globally, and the value of the fund's assets may go down.

Economies and financial markets throughout the world are increasingly interconnected. Economic, financial or political events, trading and tariff arrangements, armed conflict including Russia's military invasion of Ukraine, terrorism, natural disasters, infectious illness or public health issues, cybersecurity events, supply chain disruptions, sanctions against Russia, other nations or individuals or companies and possible countermeasures, and other circumstances in one country or region could have profound impacts on other countries or regions and on global economies or markets. As a result, whether or not the fund invests in securities of issuers located in or with significant exposure to the countries or regions directly affected, the value and liquidity of the fund's investments may be negatively affected. The fund may experience a substantial or complete loss on any security or derivative position.

Until recently, a commonly used reference rate for floating rate securities was LIBOR (London Interbank Offered Rate) or Secured Overnight Financing Rate (SOFR). ICE Benchmark Administration, the administrator of LIBOR, has ceased publication of most LIBOR settings on a representative basis. Actions by regulators have resulted in the establishment of alternative reference rates to LIBOR in most major currencies. In the U.S., a common benchmark replacement is based on the Secured Overnight Financing Rate (SOFR) published by the Federal Reserve Bank of New York, including certain spread adjustments and benchmark replacement conforming changes, although other benchmark replacements (with or without spread adjustments) may be used in certain transactions. The impact of the transition

from LIBOR on the fund's transactions and financial markets generally cannot yet be determined. The transition away from LIBOR may lead to increased volatility and illiquidity in markets for instruments that have relied on LIBOR and may adversely affect the fund's performance.

High yield or “junk” bond risk. Debt securities that are below investment grade, called “junk bonds,” are speculative, have a higher risk of default or are already in default, tend to be less liquid and are more difficult to value than higher grade securities. Junk bonds tend to be volatile and more susceptible to adverse events and negative sentiments. These risks are more pronounced for securities that are already in default.

Interest rate risk. The market prices of the fund's fixed income securities may fluctuate significantly when interest rates change. The value of your investment will generally go down when interest rates rise. A rise in rates tends to have a greater impact on the prices of longer term or duration securities. For example, if interest rates increase by 1%, the value of a fund's portfolio with a portfolio duration of ten years would be expected to decrease by 10%, all other things being equal. In recent years, interest rates and credit spreads in the U.S. have been at historic lows. The U.S. Federal Reserve has raised certain interest rates, and interest rates may continue to go up. A general rise in interest rates could adversely affect the price and liquidity of fixed income securities and could also result in increased redemptions from the fund. The maturity of a security may be significantly longer than its effective duration. A security's maturity and other features may be more relevant than its effective duration in determining the security's sensitivity to other factors affecting the issuer or markets generally, such as changes in credit quality or in the yield premium that the market may establish for certain types of securities (sometimes called “credit spread”). In general, the longer its maturity the more a security may be susceptible to these factors. When the credit spread for a fixed income security goes up or “widens,” the value of the security will generally go down.

Rising interest rates can lead to increased default rates, as issuers of floating rate securities find themselves faced with higher payments. Unlike fixed rate securities, floating rate securities generally will not increase in value if interest rates decline. Changes in interest rates also will affect the amount of interest income the fund earns on its floating rate investments.

Credit risk. If an issuer or guarantor of a security held by the fund or a counterparty to a financial contract with the fund defaults on its obligation to pay principal and/or interest, has its credit rating downgraded or is perceived to be less creditworthy, or the credit quality or value of any underlying assets declines, the value of your

Summary Prospectus

investment will typically decline. Changes in actual or perceived creditworthiness may occur quickly. The fund could be delayed or hindered in its enforcement of rights against an issuer, guarantor or counterparty.

Prepayment or call risk. Many issuers have a right to prepay their securities. If interest rates fall, an issuer may exercise this right. If this happens, the fund will not benefit from the rise in market price that normally accompanies a decline in interest rates, and will be forced to reinvest prepayment proceeds at a time when yields on securities available in the market are lower than the yield on the prepaid security. The fund also may lose any premium it paid on the security.

Extension risk. During periods of rising interest rates, the average life of certain types of securities may be extended because of slower than expected principal payments. This may lock in a below market interest rate, increase the security's duration and reduce the value of the security.

Liquidity risk. Some securities and derivatives held by the fund may be or become impossible or difficult to purchase, sell or unwind, particularly during times of market turmoil. An instrument's liquidity may be affected by reduced trading volume, a relative lack of market makers or legal restrictions, and illiquid securities and derivatives also may be difficult to value. Markets may become illiquid quickly. Liquidity risk may be magnified in an environment of rising interest rates or widening credit spreads. During times of market turmoil, there have been, and may be, no buyers or sellers for securities in entire asset classes. If the fund is forced to sell an illiquid asset or unwind a derivative position to meet redemption requests or other cash needs, or to try to limit losses, the fund may be forced to sell at a substantial loss or may not be able to sell at all. The fund may not receive its proceeds from the sale of certain securities for an extended period (for example, several weeks or even longer). In extreme cases, this may constrain the fund's ability to meet its obligations (including obligations to redeeming shareholders).

Portfolio selection risk. The adviser's judgment about the quality, relative yield, relative value or market trends affecting a particular sector or region, market segment, security, industry or about interest rates or other market factors may prove to be incorrect or may not produce the desired results, or there may be imperfections, errors or limitations in the models, tools and information used by the adviser.

Climate transition and ESG risk. Amundi US's consideration of the Climate Transition Criteria in making investment decisions will result in the exclusion of investments the issuers of which do not meet the Climate Transition Criteria. To the extent other ESG information is considered in making investment decisions,

such other ESG information also may result in the exclusion of investments. Excluding specific issuers limits the universe of investments available to the fund as compared with other funds that do not consider the Climate Transition Criteria or ESG information, which may mean forgoing some investment opportunities available to funds that do not consider these criteria or information or having a portfolio with fewer holdings and/or less issuer diversification. Accordingly, the fund may underperform other funds that do not utilize an investment strategy that considers the Climate Transition Criteria or ESG information. Amundi US may use third party climate information (such as pertaining to carbon-related issuer characteristics or whether an issuer has a viable sustainability plan) or ESG ratings information that it believes to be reliable, but such information may not be accurate or complete, or may be biased.

Climate focus risk. The adviser's focus on the carbon and climate-related characteristics of issuers may increase the fund's exposure to certain investments. The fund is more susceptible to events or factors adversely affecting such investments, such as a decrease in governmental or other support for climate-related or environmental initiatives or an increase in the cost of implementing climate-related initiatives. The fund's relative performance also may be affected, depending on whether such investments are in or out of favor with the market. Under certain market conditions, the fund may underperform funds that invest in a broader array of investments.

U.S. Treasury obligations risk. The market value of direct obligations of the U.S. Treasury may vary due to changes in interest rates. In addition, changes to the financial condition or credit rating of the U.S. government may cause the value of the fund's investments in obligations issued by the U.S. Treasury to decline.

U.S. government agency obligations risk. The fund invests in obligations issued by agencies and instrumentalities of the U.S. government. Government-sponsored entities such as the Federal National Mortgage Association (FNMA), the Federal Home Loan Mortgage Corporation (FHLMC) and the Federal Home Loan Banks (FHLBs), although chartered or sponsored by Congress, are not funded by congressional appropriations and the debt and mortgage-backed securities issued by them are neither guaranteed nor issued by the U.S. government. The maximum potential liability of the issuers of some U.S. government obligations may greatly exceed their current resources, including any legal right to support from the U.S. government. Such debt and mortgage-backed securities are subject to the risk of default on the payment of interest and/or principal, similar to debt of

Summary Prospectus

private issuers. Although the U.S. government has provided financial support to FNMA and FHLMC in the past, there can be no assurance that it will support these or other government-sponsored entities in the future.

Mortgage-related and asset-backed securities risk. The value of mortgage-related securities, including commercial mortgage-backed securities, collateralized mortgage-backed securities, credit risk transfer securities, and asset-backed securities, will be influenced by factors affecting the assets underlying such securities. As a result, during periods of declining asset value, difficult or frozen credit markets, swings in interest rates, or deteriorating economic conditions, mortgage-related and asset-backed securities may decline in value, face valuation difficulties, become more volatile and/or become illiquid. Mortgage-backed securities tend to be more sensitive to changes in interest rates than other types of debt securities. These securities are also subject to interest rate, prepayment and extension risks. Some of these securities may receive little or no collateral protection from the underlying assets and are thus subject to the risk of default. The risk of such defaults is generally higher in the case of mortgage-backed investments offered by non-governmental issuers and those that include so-called “sub-prime” mortgages. The structure of some of these securities may be complex and there may be less available information than for other types of debt securities. Upon the occurrence of certain triggering events or defaults, the fund may become the holder of underlying assets at a time when those assets may be difficult to sell or may be sold only at a loss.

Risks of instruments that allow for balloon payments or negative amortization payments. Certain debt instruments allow for balloon payments or negative amortization payments. Such instruments permit the borrower to avoid paying currently a portion of the interest accruing on the instrument. While these features make the debt instrument more affordable to the borrower in the near term, they increase the risk that the borrower will be unable to make the resulting higher payment or payments that become due at the maturity of the loan.

Risks of investing in loans. Floating rate loans and similar investments may be illiquid or less liquid than other investments and difficult to value. The value of collateral, if any, securing a floating rate loan can decline or may be insufficient to meet the issuer’s obligations or may be difficult to liquidate. Market quotations for these securities may be volatile and/or subject to large spreads between bid and ask prices. No active trading market may exist for many floating rate loans, and many loans are subject to restrictions on resale. Any secondary market may be subject to irregular trading activity and extended trade settlement periods. In particular, loans may take longer than seven days to settle, potentially leading to the sale

proceeds of loans not being available to meet redemption requests for a substantial period of time after the sale of the loans. To the extent that sale proceeds of loans are not available, the fund may sell securities that have shorter settlement periods or may access other sources of liquidity to meet redemption requests. There is less readily available, reliable information about most senior loans than is the case for many other types of securities. The adviser's decision not to receive material, non-public information about an issuer of a loan either held by, or considered for investment by, the fund, under normal circumstances could place it at a disadvantage, relative to other loan investors, in assessing a loan or the loan's issuer, and adversely affect the fund's investment performance. Loans may not be considered "securities," and purchasers, such as the fund, therefore may not be entitled to rely on the anti-fraud protections afforded by federal securities laws.

Risks of investing in insurance-linked securities. The fund could lose a portion or all of the principal it has invested in an insurance-linked security, and the right to additional interest and/or dividend payments with respect to the security, upon the occurrence of one or more trigger events, as defined within the terms of an insurance-linked security. Trigger events may include natural or other perils of a specific size or magnitude that occur in a designated geographic region during a specified time period, and/or that involve losses or other metrics that exceed a specific amount. The fund may also invest in insurance-linked securities that are subject to "indemnity triggers." An indemnity trigger is a trigger based on the actual losses of the ceding sponsor (i.e., the party seeking reinsurance). Insurance-linked securities subject to indemnity triggers are often regarded as being subject to potential moral hazard, since such insurance-linked securities are triggered by actual losses of the ceding sponsor and the ceding sponsor may have an incentive to take actions and/or risks that would have an adverse effect on the fund. There is no way to accurately predict whether a trigger event will occur and, accordingly, insurance-linked securities carry significant risk. In addition to the specified trigger events, insurance-linked securities may expose the fund to other risks, including but not limited to issuer (credit) default, adverse regulatory or jurisdictional interpretations and adverse tax consequences. Certain insurance-linked securities may have limited liquidity, or may be illiquid. The fund has limited transparency into the individual contracts underlying certain insurance-linked securities, which may make the risk assessment of such securities more difficult. Certain insurance-linked securities may be difficult to value.

Inflation-linked securities risk. The principal or interest of inflation-linked securities such as TIPS is adjusted periodically to a specified rate of inflation. The inflation index used may not accurately measure the real rate of inflation. Inflation-linked securities may lose value or interest payments on such securities

Summary Prospectus

may decline in the event that the actual rate of inflation is different than the rate of the inflation index, and losses may exceed those experienced by other debt securities with similar durations. The values of inflation-linked securities may not be directly correlated to changes in interest rates, for example if interest rates rise for reasons other than inflation.

Risks of subordinated securities. A holder of securities that are subordinated or “junior” to more senior securities of an issuer is entitled to payment after holders of more senior securities of the issuer. Subordinated securities are more likely to suffer a credit loss than non-subordinated securities of the same issuer, any loss incurred by the subordinated securities is likely to be proportionately greater, and any recovery of interest or principal may take more time. As a result, even a perceived decline in creditworthiness of the issuer is likely to have a greater impact on subordinated securities than more senior securities.

Municipal securities risk. The municipal bond market can be susceptible to unusual volatility, particularly for lower-rated and unrated securities. Liquidity can be reduced unpredictably in response to overall economic conditions or credit tightening. Municipal issuers may be adversely affected by rising health care costs, increasing unfunded pension liabilities, and by the phasing out of federal programs providing financial support. Unfavorable conditions and developments relating to projects financed with municipal securities can result in lower revenues to issuers of municipal securities, potentially resulting in defaults. Issuers often depend on revenues from these projects to make principal and interest payments. The value of municipal securities can also be adversely affected by changes in the financial condition of one or more individual municipal issuers or insurers of municipal issuers, regulatory and political developments, tax law changes or other legislative actions, and by uncertainties and public perceptions concerning these and other factors. Municipal issuers may be more susceptible to downgrades or defaults during recessions or similar periods of economic stress. Financial difficulties of municipal issuers may continue or get worse, particularly in the event of political, economic or market turmoil or a recession. To the extent the fund invests significantly in a single state, city, territory (including Puerto Rico), or region, or in securities the payments on which are dependent upon a single project or source of revenues, or that relate to a sector or industry, the fund will be more susceptible to associated risks and developments.

Risks of zero coupon bonds, payment in kind, deferred and contingent payment securities. These securities may be more speculative and may fluctuate more in value than securities which pay income periodically and in cash. In addition, although the fund receives no periodic cash payments on such securities, the fund

is deemed for tax purposes to receive income from such securities, which applicable tax rules require the fund to distribute to shareholders. Such distributions may be taxable when distributed to shareholders.

Risks of investing in when-issued, delayed delivery, to be announced and forward commitment transactions. The market value of these transactions may increase or decrease as a result of changes in interest rates. These transactions involve risk of loss if the value of the underlying security changes unfavorably before the settlement date or if the assets set aside to pay for these securities decline in value prior to the settlement date. Therefore, these transactions may have a leveraging effect on the fund, making the value of an investment in the fund more volatile and increasing the fund's overall investment exposure. There is also a risk that the security will not be issued or that the other party to the transaction will default on its obligation to purchase or sell the security, which may result in the fund missing the opportunity to obtain a favorable price or yield elsewhere.

Risks of non-U.S. investments. Investing in non-U.S. issuers, or in U.S. issuers that have significant exposure to foreign markets, may involve unique risks compared to investing in securities of U.S. issuers. These risks are more pronounced for issuers in emerging markets or to the extent that the fund invests significantly in one region or country. These risks may include different financial reporting practices and regulatory standards, less liquid trading markets, extreme price volatility, currency risks, changes in economic, political, regulatory and social conditions, military conflicts and sanctions, terrorism, sustained economic downturns, financial instability, reduction of government or central bank support, inadequate accounting standards, tariffs, tax disputes or other tax burdens, nationalization or expropriation of assets, arbitrary application of laws and regulations or lack of rule of law, and investment and repatriation restrictions. Lack of information and less market regulation also may affect the value of these securities. Withholding and other non-U.S. taxes may decrease the fund's return. Non-U.S. issuers may be located in parts of the world that have historically been prone to natural disasters. Emerging market economies tend to be less diversified than those of more developed countries. They typically have fewer medical and economic resources than more developed countries and thus they may be less able to control or mitigate the effects of a pandemic. Investing in depositary receipts is subject to many of the same risks as investing directly in non-U.S. issuers. Depositary receipts may involve higher expenses and may trade at a discount (or premium) to the underlying security.

A number of countries in the European Union (EU) have experienced, and may continue to experience, severe economic and financial difficulties. In addition, the United Kingdom has withdrawn from the EU (commonly known as "Brexit"). The

Summary Prospectus

range and potential implications of possible political, regulatory, economic, and market outcomes of Brexit cannot be fully known but could be significant, potentially resulting in increased volatility, illiquidity and potentially lower economic growth in the affected markets, which will adversely affect the fund's investments.

Sanctions or other government actions against certain countries could negatively impact the fund's investments in securities that have exposure to those countries. Circumstances that impact one country could have profound impacts on other countries and on global economies or markets. China and other developing market countries may be subject to considerable degrees of economic, political and social instability. The U.S. government has imposed restrictions on U.S. investor participation in certain Chinese investments. These matters could adversely affect China's economy. In addition, China's long-running conflict over Taiwan's sovereignty, border disputes with many neighbors and historically strained relations with other Asian countries could result in military conflict that could adversely impact the economies of China and other Asian countries, disrupt supply chains, and severely affect global economies and markets.

Russia launched a large-scale invasion of Ukraine on February 24, 2022. In response to the military action by Russia, various countries, including the U.S., the United Kingdom, and European Union, issued broad-ranging economic sanctions against Russia and Belarus and certain companies and individuals. Russia has taken retaliatory actions, including preventing repatriation of capital by U.S. and other investors. Since then, Russian securities have lost all, or nearly all, their market value, and many other issuers, securities and markets have been adversely affected. The ongoing conflict has resulted in significant market disruptions, including in certain markets, industries and sectors, such as the oil and natural gas markets, and negatively affected global supply chains, food supplies, inflation and global growth. The U.S. and other countries may impose sanctions on other countries, companies and individuals in light of Russia's military invasion. The extent and duration of the military action or future escalation of such hostilities, the extent and impact of existing and future sanctions, market disruptions and volatility, and the result of any diplomatic negotiations cannot be predicted. These and any related events could have a significant impact on the value and liquidity of certain fund investments, on fund performance and the value of an investment in the fund.

Currency risk. The fund could experience losses based on changes in the exchange rate between non-U.S. currencies and the U.S. dollar or as a result of currency conversion costs. Currency exchange rates can be volatile, and are affected by factors such as general economic conditions, the actions of the U.S. and foreign governments or central banks, the imposition of currency controls and speculation.

Equity securities risk. Equity securities are subject to the risk that stock prices may rise and fall in periodic cycles and may perform poorly relative to other investments. This risk may be greater in the short term. Equity securities represent an ownership interest in an issuer, rank junior in a company's capital structure to debt securities and consequently may entail greater risk of loss than debt securities.

Risks of convertible securities. The market values of convertible securities tend to decline as interest rates increase and, conversely, to increase as interest rates decline. A downturn in equity markets may cause the price of convertible securities to decrease relative to other fixed income securities.

Preferred stocks risk. Preferred stocks may pay fixed or adjustable rates of return. Preferred stocks are subject to issuer-specific and market risks applicable generally to equity securities. In addition, a company's preferred stocks generally pay dividends only after the company makes required payments to holders of its bonds and other debt. Thus, the value of preferred stocks will usually react more strongly than bonds and other debt to actual or perceived changes in the company's financial condition or prospects. The market value of preferred stocks generally decreases when interest rates rise. Also, the market prices of preferred stocks are more sensitive to changes in the issuer's creditworthiness than are the prices of debt securities. Generally, under normal circumstances, preferred stocks do not carry voting rights. Preferred stocks may trade less frequently and in a more limited volume and may be subject to more abrupt or erratic price movements than other securities. Preferred stocks of smaller companies may be more vulnerable to adverse developments than preferred stocks of larger companies.

Risks of investment in other funds. Investing in other investment companies, including exchange-traded funds (ETFs) and closed-end funds, subjects the fund to the risks of investing in the underlying securities or assets held by those funds. When investing in another fund, the fund will bear a pro rata portion of the underlying fund's expenses, including management fees, in addition to its own expenses. ETFs and closed-end funds are bought and sold based on market prices and can trade at a premium or a discount to the ETF's or closed-end fund's net asset value. Such funds may trade at a discount for an extended period and may not ever realize their net asset value.

Derivatives risk. Using swaps, futures and other derivatives can increase fund losses and reduce opportunities for gains when market prices, interest rates, currencies or the derivative instruments themselves behave in a way not anticipated by the fund. Using derivatives may increase the volatility of the fund's net asset value and may not provide the result intended. Derivatives may have a leveraging effect on the fund. Some derivatives have the potential for unlimited loss, regardless

Summary Prospectus

of the size of the fund's initial investment. Derivatives are generally subject to the risks applicable to the assets, rates, indices or other indicators underlying the derivative. Changes in a derivative's value may not correlate well with the referenced asset or metric. The fund also may have to sell assets at inopportune times to satisfy its obligations. Derivatives may be difficult to sell, unwind or value, and the counterparty may default on its obligations to the fund. Use of derivatives may have different tax consequences for the fund than an investment in the underlying security, and such differences may affect the amount, timing and character of income distributed to shareholders. The U.S. government and foreign governments have adopted and implemented or are in the process of adopting and implementing regulations governing derivatives markets, including mandatory clearing of certain derivatives, margin and reporting requirements. The ultimate impact of the regulations remains unclear. Additional regulation of derivatives may make them more costly, limit their availability or utility, otherwise adversely affect their performance or disrupt markets.

Credit default swap risk. Credit default swap contracts, a type of derivative instrument, involve special risks and may result in losses to the fund. Credit default swaps may in some cases be illiquid, and they increase credit risk since the fund has exposure to the issuer of the referenced obligation and either the counterparty to the credit default swap or, if it is a cleared transaction, the brokerage firm through which the trade was cleared and the clearing organization that is the counterparty to that trade.

Risks of investing in inverse floating rate obligations. The interest rate on inverse floating rate obligations will generally decrease as short-term interest rates increase, and increase as short-term rates decrease. Due to their leveraged structure, the sensitivity of the market value of an inverse floating rate obligation to changes in interest rates is generally greater than a comparable long-term bond issued by the same issuer and with similar credit quality, redemption and maturity provisions. Inverse floating rate obligations may be volatile and involve leverage risk.

Forward foreign currency transactions risk. The fund may not fully benefit from or may lose money on forward foreign currency transactions if changes in currency rates do not occur as anticipated or do not correspond accurately to changes in the value of the fund's holdings, or if the counterparty defaults. Such transactions may also prevent the fund from realizing profits on favorable movements in exchange rates. Risk of counterparty default is greater for counterparties located in emerging markets.

Leveraging risk. The value of your investment may be more volatile and other risks tend to be compounded if the fund borrows or uses derivatives or other investments, such as ETFs, that have embedded leverage. Leverage generally magnifies the effect of any increase or decrease in the value of the fund's underlying assets and creates a risk of loss of value on a larger pool of assets than the fund would otherwise have, potentially resulting in the loss of all assets. Engaging in such transactions may cause the fund to liquidate positions when it may not be advantageous to do so to satisfy its obligations. New derivatives regulations require the fund, to the extent it uses derivatives to a material extent, to, among other things, comply with certain overall limits on leverage. These regulations may limit the ability of the fund to pursue its investment strategies and may not be effective to mitigate the fund's risk of loss from derivatives.

Market segment risk. To the extent the fund emphasizes, from time to time, investments in a market segment, the fund will be subject to a greater degree to the risks particular to that segment, and may experience greater market fluctuation than a fund without the same focus.

Valuation risk. Nearly all of the fund's investments are valued using a fair value methodology. The sales price the fund could receive for any particular portfolio investment may differ from the fund's valuation of the investment, particularly for illiquid securities and securities that trade in thin or volatile markets. These differences may increase significantly and affect fund investments more broadly during periods of market volatility. Investors who purchase or redeem fund shares may receive fewer or more shares or lower or higher redemption proceeds than they would have received if the securities had not been fair-valued or if a different valuation methodology had been used. The ability to value the fund's investments may also be impacted by technological issues and/or errors by pricing services or other third party service providers.

Redemption risk. The fund may experience heavy redemptions that could cause the fund to liquidate its assets at inopportune times or at a loss or depressed value, or accelerate taxable gains or transaction costs, which could cause the value of your investment to decline.

Cybersecurity risk. Cybersecurity failures by and breaches of the fund's adviser, transfer agent, distributor, custodian, fund accounting agent or other service providers may disrupt fund operations, interfere with the fund's ability to calculate its NAV, prevent fund shareholders from purchasing, redeeming or exchanging shares or receiving distributions or receiving timely information regarding the fund or their investment in the fund, cause loss of or unauthorized access to private shareholder information, and result in financial losses to the fund and its shareholders,

Summary Prospectus

regulatory fines, penalties, reputational damage, or additional compliance costs. New ways to carry out cyber attacks continue to develop. Therefore, there is a chance that some risks have not been identified or prepared for, or that an attack may not be detected, which puts limitations on the fund's ability to plan for or respond to a cyber attack.

Expense risk. Your actual costs of investing in the fund may be higher than the expenses shown in “Annual fund operating expenses” for a variety of reasons. For example, expense ratios may be higher than those shown if overall net assets decrease. Net assets are more likely to decrease and fund expense ratios are more likely to increase when markets are volatile.

Please note that there are many other factors that could adversely affect your investment and that could prevent the fund from achieving its goals.

An investment in the fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

The fund’s performance

Since the fund does not yet have a full calendar year of operations, it does not disclose any performance information in this prospectus. The performance information provided by the fund in the future will give some indication of the risks of an investment in the fund by showing changes in the fund's performance from year to year and by showing how the fund's average annual returns compare with those of a broad measure of market performance.

Management

Investment adviser

Amundi Asset Management US, Inc. (“Amundi US”)

Portfolio management

Jonathan M. Duensing, Senior Managing Director, Head of Fixed Income, US and Director of Multi-Sector Fixed Income of Amundi US (portfolio manager of the fund since 2022); Brad Komenda, Managing Director and Director of Investment Grade Corporates of Amundi US (portfolio manager of the fund since 2022); Jonathan Scott, Senior Vice President and Deputy Director of Multi-Sector Fixed Income of Amundi US (portfolio manager of the fund since 2022); and Chin Liu, Managing Director, Director of Insurance-Linked Securities, and Director of Fixed Income Solutions of Amundi US (portfolio manager of the fund since 2022).

Purchase and sale of fund shares

You may purchase, exchange or sell (redeem) shares each day the New York Stock Exchange is open through your financial intermediary or, for accounts held directly with the fund, by contacting the fund in writing or by telephone: Pioneer Funds, P.O. Box 534427, Pittsburgh, PA 15253-4427, tel. 1-800-225-6292.

Your initial investment for Class A or Class C shares must be at least \$1,000. Additional investments must be at least \$100 for Class A shares and \$500 for Class C shares. Generally, the initial investment for Class K or Class Y shares must be at least \$5 million. This amount may be invested in one or more of the Pioneer mutual funds that currently offer Class K or Class Y shares, as applicable. There is no minimum additional investment amount for Class K or Class Y shares.

Tax information

The fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains.

Payments to broker-dealers and other financial intermediaries

If you purchase the fund through a broker-dealer or other financial intermediary (such as a bank), the fund and its related companies may pay the intermediary for the sale of fund shares and related services. These payments create a conflict of

Summary Prospectus

interest by influencing the broker-dealer or other intermediary and your salesperson or investment professional to recommend the fund over another investment. Ask your salesperson or investment professional or visit your financial intermediary's website for more information.

[Click here to view the Fund's Prospectus](#)

[Click here to view the Fund's Statement of Additional Information](#)