February 14, 2014

Pioneer Real Estate Shares VCT Portfolio

Supplement to the May 1, 2013 Class I and Class II Shares Prospectuses, as in effect and as may be amended from time to time

Portfolio summary

Effective March 2, 2014, the following replaces the corresponding information under the heading "Management" in the section entitled "Portfolio summary":

Portfolio management Matthew A. Troxell, CFA, managing director and senior portfolio manager at AEW (portfolio manager of the portfolio since 2004); J. Hall Jones, Jr., CFA, director of AEW (portfolio manager of the portfolio since 2012); Roman Ranocha, CFA, director of AEW (portfolio manager of the portfolio since 2012); and John A. Garofalo, CFA, director of AEW (portfolio manager of the portfolio since 2014)

Management

Effective March 2, 2014, the following replaces the corresponding information under the heading "Portfolio management" in the section entitled "Management":

Portfolio management

Day-to-day management of the portfolio is the responsibility of Matthew A. Troxell, CFA (portfolio manager of the portfolio since 2004). Mr. Troxell is a managing director and senior portfolio manager at AEW with responsibility for construction and management of all the firm's publicly traded real estate equities portfolios. He has been employed at AEW as part of the REIT group since 1994 and has over 30 years of experience in investment analysis and portfolio management. Mr. Troxell is supported by three portfolio managers: J. Hall Jones, Jr., CFA, director of AEW (co-portfolio manager of the portfolio since 2012); Roman Ranocha, CFA, director of AEW (co-portfolio manager of the portfolio since 2012); and John A. Garofalo, CFA, director of AEW (co-portfolio manager of the portfolio since 2014). Prior to joining AEW in March 2014, Mr. Garofalo was a portfolio manager and chief investment officer at Merestone Capital Management.

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Pioneer Real Estate Shares VCT Portfolio

A portfolio of Pioneer Variable Contracts Trust

Class II Shares

Prospectus, May 1, 2013

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Neither the Securities and Exchange Commission nor any state securities agency has approved or disapproved the portfolio's shares or determined whether this prospectus is accurate or complete. Any representation to the contrary is a crime.

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Portfolio summary

Investment objectives

Long-term growth of capital. Current income is a secondary objective.

Fees and expenses

This table describes the fees and expenses that you may pay if you buy and hold shares of the portfolio. **Your costs would be higher if fees or sales charges imposed by a Variable Contract for which the portfolio is an investment option were included.** Please consult your insurance company's separate account prospectus or disclosure document for more information.

Annual portfolio operating expenses

(expenses that you pay each year as a percentage of the value of your investment)	**Class II**
Management Fees	0.80%
Distribution and Service (12b-1) Fees	0.25%
Other Expenses	0.21%
Total Annual Portfolio Operating Expenses	1.26%

Example

This example is intended to help you compare the cost of investing in the portfolio with the cost of investing in other mutual funds. The example assumes that you invest $10,000 in the portfolio for the time periods shown and then 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 portfolio's total annual operating expenses remain the same. This example does not reflect any fees or sales charges imposed by a Variable Contract for which the portfolio is an investment option. If they were included, your costs would be higher.

Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	Number of years you own your shares (with or without redemption)			
	1	**3**	**5**	**10**
Class II	$128	$400	$692	$1,523

Portfolio turnover

The portfolio 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. These costs, which are not reflected in annual portfolio operating expenses or in the example, affect the portfolio's performance. During the most recent fiscal year, the portfolio turnover rate was 5% of the average value of the portfolio.

Principal investment strategies

Normally, the portfolio invests at least 80% of its total assets in equity securities of real estate investment trusts (REITs) and other real estate industry issuers. The portfolio may at times emphasize particular sub-sectors of the real estate industry. For purposes of the portfolio's investment policies, equity securities include common stocks and other equity instruments, such as exchange-traded funds (ETFs) that invest primarily in equity securities, warrants, rights, and preferred stocks.

The portfolio may invest up to 20% of its total assets in debt securities of real estate industry issuers, mortgage-backed securities and short-term investments. The portfolio may invest up to 5% of its net assets in below investment grade debt securities (known as "junk bonds"), including below investment grade convertible debt securities.

The portfolio may invest up to 10% of its total assets in securities of non-U.S. issuers. Up to 5% of the portfolio's total assets may be invested in the securities of emerging markets issuers.

The portfolio may, but is not required to, use derivatives. The portfolio may use derivatives for a variety of purposes, including as a hedge against adverse changes in the market price of securities, interest rates or currency exchange rates; as a substitute for purchasing or selling securities; and to increase the portfolio's return as a non-hedging strategy that may be considered speculative. The portfolio may choose not to make use of derivatives for a variety of reasons, and any use may be limited by applicable law and regulations. The portfolio also may hold cash or other short-term investments.

The portfolio may invest in fewer than 40 securities. The portfolio may invest in initial public offerings of equity securities.

The portfolio uses a "growth at a reasonable price" style of management. The subadviser seeks to invest in companies with above average potential for earnings and revenue growth that are also trading at attractive market valuations. To select stocks, the subadviser employs fundamental and qualitative research and an evaluation of the issuer based on its financial statements and operations. The subadviser focuses on the quality and price of individual issuers and securities. The subadviser generally sells a portfolio security when it believes that the issuer no longer offers the potential for above average earnings and revenue growth.

Principal risks of investing in the portfolio

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

Market risk. The values of securities held by the portfolio 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, inflation, changes in interest or currency rates or adverse investor sentiment. Adverse market conditions may be prolonged and may not have the same impact on all types of securities. The values of securities may fall due to factors affecting a particular issuer, industry or the securities market as a whole. The stock market may perform poorly relative to other investments (this risk may be greater in the short term). High public debt in the U.S. and other countries creates ongoing systemic and market risks and policymaking uncertainty. The financial crisis that began in 2008 has caused a significant decline in the value and liquidity of many securities of issuers worldwide. Some governmental and non-governmental issuers (notably in Europe) have defaulted on, or been forced to restructure, their debts, and many other issuers have faced difficulties obtaining credit. These market conditions may continue, worsen or spread, including in the U.S., Europe and beyond. Further defaults or restructurings by governments and others of their debt could have additional adverse effects on economies, financial markets and asset valuations around the world. In response to the crisis, the U.S. and other governments and the Federal Reserve and certain foreign central banks have taken steps to support financial markets. The withdrawal of this support, failure of efforts in response to the crisis, or investor perception that these efforts are not succeeding could negatively affect financial markets generally as well as the value and liquidity of certain securities. Whether or not the portfolio invests in securities of issuers located in or with significant exposure to countries experiencing economic and financial difficulties, the value and liquidity of the portfolio's investments may be negatively affected by the countries experiencing these difficulties. In addition, policy and legislative changes in the U.S. and in other countries are affecting many aspects of financial regulation. The impact of these changes on the markets, and the practical implications for market participants, may not be fully known for some time. The portfolio may experience a substantial or complete loss on any individual security.

Growth style risk. The portfolio's investments may not have the growth potential originally expected. Growth stocks may fall out of favor with investors and underperform the overall equity market.

Portfolio selection risk. The subadviser's judgment about a particular security or issuer, or about the economy or a particular sector, region or market segment, or about an investment strategy, may prove to be incorrect.

Issuer focus risk. The portfolio may invest in fewer than 40 securities and, as a result, the portfolio's performance may be more volatile than the performance of funds holding more securities.

Risks of investments in REITs. The portfolio concentrates its investments in the real estate industry. The risks of investing in REITs and other equity securities of real estate industry issuers include declines in the real estate market due to adverse economic conditions, overbuilding or other causes; increases in interest rates; and declines in property values.

Investing in REITs involves unique risks. They are significantly affected by the market for real estate and are dependent upon management skills and cash flow. REITs may have lower trading volumes and may be subject to more abrupt or erratic price movements than the overall securities markets. In addition to its own expenses, the portfolio will indirectly bear its proportionate share of any management and other expenses paid by REITs in which it invests. Many real estate companies, including REITs, utilize leverage.

Small and mid-size companies risk. Compared to large companies, small- and mid-size companies, and the market for their equity securities, may be more sensitive to changes in earnings results and investor expectations, have more limited product lines and capital resources, experience sharper swings in market values, have limited liquidity, be harder to value or to sell at the times and prices the subadviser thinks appropriate, and offer greater potential for gain and loss.

Debt securities risk. Factors that could contribute to a decline in the market value of debt securities in the portfolio include rising interest rates, if the issuer or other obligor of a security held by the portfolio fails to pay principal and/or interest, otherwise defaults or has its credit rating downgraded or is perceived to be less creditworthy or the credit quality or value of any underlying assets declines. Junk bonds involve greater risk of loss, are subject to greater price volatility and are less liquid, especially during periods of economic uncertainty or change, than higher quality debt securities; they may also be more difficult to value. Junk bonds have a higher risk of default or are already in default and are considered speculative.

Mortgage-backed securities risk. The value of mortgage-backed securities will be influenced by factors affecting the housing market and 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-backed securities may decline in value, face valuation difficulties, become more volatile and/or become illiquid. Additionally, during such periods and also under normal conditions, these securities are also subject to prepayment and call risk. 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 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 portfolio 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 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 portfolio 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, sustained economic downturns, financial instability, tax burdens, 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 portfolio’s return. Non-U.S. issuers may be located in parts of the world that have historically been prone to natural disasters. Investing in depositary receipts is subject to many of the same risks as investing directly in non-U.S. issuers.

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

Derivatives risk. Using derivatives can increase portfolio losses and reduce opportunities for gains when market prices, interest rates or the derivative instruments themselves behave in a way not anticipated by the portfolio. Using derivatives may increase the volatility of the portfolio’s net asset value and may not provide

the result intended. Derivatives may have a leveraging effect on the portfolio. Some derivatives have the potential for unlimited loss, regardless of the size of the portfolio's initial investment. Changes in a derivative's value may not correlate well with the referenced asset or metric. The portfolio 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 portfolio. Recent legislation calls for new regulation of the derivatives markets. The extent and impact of the regulation is not yet fully known and may not be for some time. New regulation of derivatives may make them more costly, may limit their availability, or may otherwise adversely affect their value or performance.

Risks of initial public offerings. Companies involved in initial public offering (IPOs) generally have limited operating histories, and prospects for future profitability are uncertain. The market for IPO issuers has been volatile, and share prices of newly public companies have fluctuated significantly over short periods of time. Further, stocks of newly-public companies may decline shortly after the IPO. There is no assurance that the portfolio will have access to IPOs. The purchase of IPO shares may involve high transaction costs.

Leveraging risk. The value of your investment may be more volatile and other risks tend to be compounded if the portfolio 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 portfolio's underlying assets or creates investment risk with respect to a larger pool of assets than the portfolio would otherwise have, potentially resulting in the loss of all assets. Engaging in such transactions may cause the portfolio to liquidate positions when it may not be advantageous to do so to satisfy its obligations or meet segregation requirements.

Expense risk. Your actual costs of investing in the portfolio may be higher than the expenses shown in "Annual portfolio 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 portfolio 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 portfolio from achieving its goals.

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

The portfolio's past performance

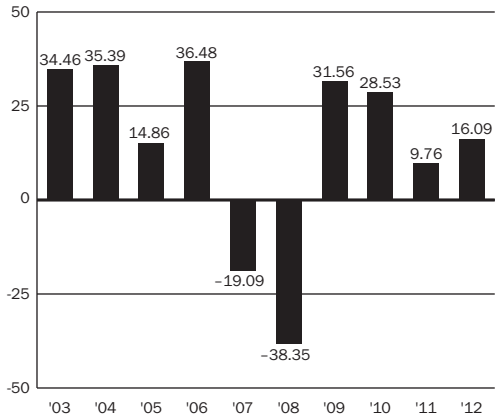
The bar chart and table indicate the risks and volatility of an investment in the portfolio by showing how the portfolio has performed in the past. The bar chart shows changes in the performance of the portfolio's Class II shares from calendar year to calendar year. The table shows the average annual total returns for Class II shares of the portfolio over time and compares these returns to the returns of the Morgan Stanley Capital International (MSCI) REIT Index, a broad-based measure of market performance that has characteristics relevant to the portfolio's investment strategies.

The performance shown for Class II shares for periods prior to the commencement of operations of Class II shares on August 1, 2000 is based on the performance of Class I shares of the portfolio, reduced to reflect the higher distribution fee of Class II shares.

The bar chart and table do not reflect any fees or expenses payable with respect to a Variable Contract. Such fees and expenses will reduce your return.

The portfolio's past performance does not necessarily indicate how it will perform in the future.

Annual return Class II Shares (%)
(Year ended December 31)



For the period covered by the bar chart:

The highest calendar quarterly return was 33.06% (07/01/2009 to 09/30/2009).
The lowest calendar quarterly return was –39.32% (10/01/2008 to 12/31/2008).

Average annual total return (%)
(for periods ended December 31, 2012)

	1 Year	5 Years	10 Years	Since Inception (03/01/95)
Class II	16.09	5.84	11.86	11.01
Morgan Stanley Capital International (MSCI) REIT Index (reflects no deduction for fees, expenses or taxes)	17.77	5.58	11.58	11.13

Management

Investment adviser Pioneer Investment Management, Inc.

Investment subadviser AEW Capital Management, L.P.

Portfolio management Matthew A. Troxell, CFA, managing director and senior portfolio manager at AEW (portfolio manager of the portfolio since 2004); J. Hall Jones, Jr., CFA, director of AEW (portfolio manager of the portfolio since 2012); Roman Ranocha, CFA, director of AEW (portfolio manager of the portfolio since 2012); and Jeffrey P. Caira, director of AEW (portfolio manager of the portfolio since 2012)

Tax information

Shares of the portfolio are held by life insurance company separate accounts that fund the benefits under variable annuity and variable life insurance contracts (Variable Contracts) issued by their companies and by certain qualified pension and retirement plans (Qualified Plans). Owners of Variable Contracts should read the prospectus of their insurance company's Variable Contract for a discussion of the tax status of a Variable Contract, including the tax consequences of withdrawals or other payments. Participants in a Qualified Plan should consult their tax advisers regarding the tax consequences of participating in and receiving distributions or other payments relating to such plans.

Payments to broker-dealers and other financial intermediaries

If you purchase the portfolio through a broker-dealer or other financial intermediary (such as a bank), the portfolio and its related companies may pay the intermediary for the sale of portfolio shares and related services. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary and your salesperson or investment professional to recommend the portfolio over another investment. Ask your salesperson or investment professional or visit your financial intermediary's website for more information.

In addition, shares of the portfolio are offered to insurance companies to fund the benefits under Variable Contracts issued by their companies and are additionally offered to Qualified Plans. The portfolio and its related companies may pay the sponsoring insurance companies and their affiliated broker-dealers and service providers for the sale of portfolio shares and related services. These payments may create a conflict of interest by influencing insurance companies to recommend the portfolio over another investment. Your insurance company's separate account prospectus or disclosure document may contain additional information about these payments.

More on the portfolio's investment objectives and strategies

Investment objectives

Long-term growth of capital. Current income is a secondary objective.

The portfolio's investment objectives may be changed without shareholder approval. The portfolio will provide at least 30 days' notice prior to implementing any change to its investment objectives.

Principal investment strategies

Normally, the portfolio invests at least 80% of its total assets in equity securities of real estate investment trusts (REITs) and other real estate industry issuers. The portfolio may at times emphasize particular sub-sectors of the real estate industry. For purposes of the portfolio's investment policies, equity securities include common stocks and other equity instruments, such as exchange-traded funds (ETFs) that invest primarily in equity securities, warrants, rights, and preferred stocks. The portfolio may consider an ETF as a REIT or other real estate industry issuer for purposes of satisfying the portfolio's 80% policy if the ETF invests at least 80% of its net assets in the equity securities of REITs and other real estate industry issuers.

The portfolio will provide notice to shareholders at least 60 days prior to any change to its policy to invest at least 80% of its assets in equity securities of REITs and other real estate industry issuers.

The portfolio may invest up to 20% of its total assets in debt securities of real estate industry issuers, mortgage-backed securities and short-term investments. Generally, the portfolio acquires investment grade debt securities that are issued by both U.S. and non-U.S. issuers, but the portfolio may invest up to 5% of its net assets in below investment grade debt securities (known as "junk bonds"), including below investment grade convertible debt securities. The portfolio invests in debt securities when the subadviser believes they are consistent with the portfolio's investment objectives, to diversify the portfolio's portfolio or for greater liquidity.

The portfolio may invest up to 10% of its total assets in securities of non-U.S. issuers. Up to 5% of the portfolio's total assets may be invested in the securities of emerging markets issuers. The portfolio does not count securities of Canadian issuers against the limit on investment in securities of non-U.S. issuers.

The portfolio may invest in fewer than 40 securities. The portfolio may invest in initial public offerings of equity securities.

The portfolio uses a "growth at a reasonable price" style of management. Pioneer Investment Management, Inc. (Pioneer), the portfolio's investment adviser, has engaged AEW Capital Management, L.P., to act as the portfolio's subadviser under Pioneer's supervision. Using this investment style, the subadviser seeks to invest in companies with above average potential for earnings and revenue growth that are also trading at attractive market valuations. To select stocks, the subadviser employs fundamental and qualitative research and an evaluation of the issuer based on its financial statements and operations. The subadviser relies on the knowledge, experience and judgment of its staff who have access to a wide variety of research. The subadviser focuses on the quality and price of individual issuers and securities, not on economic sector or market-timing strategies. Factors the subadviser looks for in selecting investments include:

- Favorable expected returns relative to perceived risk
- Increasing cash flow or favorable prospects for cash flow growth
- Low market valuations relative to earnings forecast, net asset value and cash flow
- Favorable prospects for dividend growth

The subadviser generally sells a portfolio security when it believes that the issuer no longer offers the potential for above average earnings and revenue growth. The subadviser makes that determination based upon the same criteria it uses to select portfolio securities.

More on the portfolio's investment objectives and strategies

Investments in REITs
REITs are companies that invest primarily in income producing real estate or real estate related loans or interests. Some REITs invest directly in real estate and derive their income from the collection of rents and capital gains on the sale of properties. Other REITs invest primarily in mortgages, including "sub-prime" mortgages, secured by real estate and derive their income from collection of interest.

Real estate industry issuers
A real estate industry issuer is one that derives at least 50% of its gross revenues or net profits from either:
- the ownership, development, construction, financing, management or sale of commercial, industrial or residential real estate; or
- products or services related to the real estate industry like building supplies or mortgage servicing.

Debt securities
The portfolio may invest in debt securities of U.S. and non-U.S. issuers. Generally the portfolio may acquire debt securities that are investment grade, but the portfolio may invest in below investment grade debt securities (known as "junk bonds") including below investment grade convertible debt securities. A debt security is investment grade if it is rated in one of the top four categories by a nationally recognized statistical rating organization or determined to be of equivalent credit quality by the subadviser.

Mortgage-backed securities
The portfolio may invest in mortgage-backed securities. Mortgage-backed securities may be issued by private issuers, by government-sponsored entities such as the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Corporation (Freddie Mac) or by agencies of the U.S. government, such as the Government National Mortgage Association (Ginnie Mae). Mortgage-backed securities represent direct or indirect participations in, or are collateralized by and payable from, mortgage loans secured by real property. The portfolio's investments in mortgage-related securities may include mortgage derivatives and structured securities.

Non-U.S. investments
The portfolio may invest in securities of non-U.S. issuers, including securities of emerging markets issuers. Non-U.S. issuers are issuers that are organized and have their principal offices outside of the United States. Non-U.S. securities may be issued by non-U.S. governments, banks or corporations, or private issuers, and certain supranational organizations, such as the World Bank and the European Union. The portfolio considers emerging market issuers to include issuers organized under the laws of an emerging market country, issuers with a principal office in an emerging market country, issuers that derive at least 50% of their gross revenues or profits from goods or services produced in emerging markets, and emerging market governmental issuers.

Derivatives
The portfolio may, but is not required to, use futures and options on securities, indices and currencies, forward foreign currency exchange contracts, swaps and other derivatives. A derivative is a security or instrument whose value is determined by reference to the value or the change in value of one or more securities, currencies, indices or other financial instruments. The portfolio may use derivatives for a variety of purposes, including:
- As a hedge against adverse changes in the market prices of securities, interest rates or currency exchange rates
- As a substitute for purchasing or selling securities
- To attempt to increase the portfolio's return as a non-hedging strategy that may be considered speculative
- To manage portfolio characteristics

The portfolio may choose not to make use of derivatives for a variety of reasons, and any use may be limited by applicable law and regulations.

Cash management and temporary investments

Normally, the portfolio invests substantially all of its assets to meet its investment objectives. The portfolio may invest the remainder of its assets in securities with remaining maturities of less than one year or cash equivalents, or may hold cash. For temporary defensive purposes, including during periods of unusual cash flows, the portfolio may depart from its principal investment strategies and invest part or all of its assets in these securities or may hold cash. The portfolio may adopt a defensive strategy when the subadviser believes securities in which the portfolio normally invests have special or unusual risks or are less attractive due to adverse market, economic, political or other conditions. During such periods, it may be more difficult for the portfolio to achieve its investment objective.

Additional investment strategies

In addition to the principal investment strategies discussed above, the portfolio may also use other techniques, including the following non-principal investment strategies.

Reverse repurchase agreements and borrowing

The portfolio may enter into reverse repurchase agreements pursuant to which the portfolio transfers securities to a counterparty in return for cash, and the portfolio agrees to repurchase the securities at a later date and for a higher price. Reverse repurchase agreements are treated as borrowings by the portfolio, are a form of leverage and may make the value of an investment in the portfolio more volatile and increase the risks of investing in the portfolio. The portfolio also may borrow money from banks or other lenders for temporary purposes. The portfolio may borrow up to 33⅓% of its total assets. Entering into reverse repurchase agreements and other borrowing transactions may cause the portfolio to liquidate positions when it may not be advantageous to do so in order to satisfy its obligations or meet segregation requirements.

Short-term trading

The portfolio usually does not trade for short-term profits. The portfolio will sell an investment, however, even if it has only been held for a short time, if it no longer meets the portfolio's investment criteria. If the portfolio does a lot of trading, it may incur additional operating expenses, which would reduce performance.

More on the risks of investing in the portfolio

Principal investment risks

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

Market risk. The values of securities held by the portfolio 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, inflation, changes in interest or currency rates or adverse investor sentiment. Adverse market conditions may be prolonged and may not have the same impact on all types of securities. The values of securities may fall due to factors affecting a particular issuer, industry or the securities market as a whole. The equity and debt capital markets in the United States and internationally have experienced unprecedented volatility in recent years. The stock market may perform poorly relative to other investments (this risk may be greater in the short term). High public debt in the U.S. and other countries creates ongoing systemic and market risks and policymaking uncertainty. The financial crisis that began in 2008 has caused a significant decline in the value and liquidity of many securities; in particular, the values of some sovereign debt and of securities of issuers that invest in sovereign debt and related investments have fallen, credit has become more scarce worldwide and there has been significant uncertainty in the markets. Some governmental and non-governmental issuers (notably in Europe) have defaulted on, or been forced to restructure, their debts; and many other issuers have faced difficulties refinancing existing obligations. These market conditions may continue, worsen or spread, including in the U.S., Europe and beyond. Further defaults or restructurings by governments and others of their debt could have additional adverse effects on economies, financial markets and asset valuations around the world. In response to the crisis, the U.S. and other governments and the Federal Reserve and certain foreign central banks have taken steps to support financial markets. The withdrawal of this support, failure of efforts in response to the crisis, or investor perception that such efforts are not succeeding could negatively affect financial markets generally as well as the value and liquidity of certain securities. This environment could make identifying investment risks and opportunities especially difficult for the adviser, and whether or not the portfolio invests in securities of issuers located in or with significant exposure to countries experiencing economic and financial difficulties, the value and liquidity of the portfolio's investments may be negatively affected. In addition, policy and legislative changes in the U.S. and in other countries are affecting many aspects of financial regulation. The impact of these changes on the markets, and the practical implications for market participants, may not be fully known for some time. The portfolio may experience a substantial or complete loss on any individual security.

Growth style risk. The portfolio's investments may not have the growth potential originally expected. Growth stocks may fall out of favor with investors and underperform the overall equity market.

Portfolio selection risk. The subadviser's judgment about a particular security or issuer, or about the economy or a particular sector, region or market segment, or about an investment strategy, may prove to be incorrect.

Issuer focus risk. The portfolio may invest in fewer than 40 securities and, as a result, the portfolio's performance may be more volatile than the performance of funds holding more securities.

Risks of investments in REITs. Although the portfolio does not invest directly in real estate, it does invest in REITs and other equity securities of real estate industry issuers. The portfolio concentrates its investments in the real estate industry. Risks associated with investments in the real estate industry may include:

- The U.S. or a local real estate market declines due to adverse economic conditions, foreclosures, overbuilding and high vacancy rates, reduced or regulated rents or other causes
- Interest rates go up. Rising interest rates can adversely affect the availability and cost of financing for property acquisitions and other purposes and reduce the value of a REIT's fixed income investments
- The values of properties owned by a REIT or the prospects of other real estate industry issuers may be hurt by property tax increases, zoning changes, other governmental actions, environmental liabilities, natural disasters or increased operating expenses

• A REIT in the portfolio's portfolio is, or is perceived by the market to be, poorly managed

Investing in REITs involves certain unique risks. REITs are dependent on management skills, are not diversified and are subject to the risks of financing projects. REITs are typically invested in a limited number of projects or in a particular market segment or geographic region, and therefore are more susceptible to adverse developments affecting a single project, market segment or geographic region than more broadly diversified investments. REITs are subject to heavy cash flow dependency, defaults by mortgagors or other borrowers and tenants, self-liquidation and the possibility of failing to qualify for certain tax and regulatory exemptions. REITs may have limited financial resources and may experience sharper swings in market values and trade less frequently and in a more limited volume than securities of larger issuers. In addition to its own expenses, the portfolio will indirectly bear its proportionate share of any management and other expenses paid by REITs in which it invests.

Many real estate companies, including REITs, utilize leverage (and some may be highly leveraged), which increases investment risk and could adversely affect a real estate company's operations and market value. In addition, capital to pay or refinance a REIT's debt may not be available or reasonably priced. Financial covenants related to real estate company leveraging may affect the company's ability to operate effectively.

Small and mid-size companies risk. Compared to large companies, small- and mid-size companies, and the market for their equity securities, may be more sensitive to changes in earnings results and investor expectations, have more limited product lines and capital resources, experience sharper swings in market values, have limited liquidity, be harder to value or to sell at the times and prices the subadviser thinks appropriate, and offer greater potential for gain and loss.

Debt securities risk. Factors that could contribute to a decline in the market value of debt securities in the portfolio include rising interest rates, if the issuer or other obligor of a security held by the portfolio fails to pay principal and/or interest, otherwise defaults or has its credit rating downgraded or is perceived to be less creditworthy or the credit quality or value of any underlying assets declines. Junk bonds involve greater risk of loss, are subject to greater price volatility and are less liquid, especially during periods of economic uncertainty or change, than higher quality debt securities; they may also be more difficult to value. Junk bonds have a higher risk of default or are already in default and are considered speculative.

Mortgage-backed securities risk. The repayment of certain mortgage-backed securities depends primarily on the cash collections received from the issuer's underlying asset portfolio and, in certain cases, the issuer's ability to issue replacement securities. As a result, there could be losses to the portfolio in the event of credit or market value deterioration in the issuer's underlying portfolio, mismatches in the timing of the cash flows of the underlying asset interests and the repayment obligations of maturing securities, or the issuer's inability to issue new or replacement securities. Upon the occurrence of certain triggering events or defaults, the portfolio 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. In the event of a default, the value of the underlying collateral may be insufficient to pay certain expenses, such as litigation and foreclosure expenses, and inadequate to pay any principal or unpaid interest. Privately issued mortgage-backed securities are not traded on an exchange and may have a limited market. Without an active trading market, these securities may be particularly difficult to value given the complexities in valuing the underlying collateral.

Certain mortgage-backed securities may pay principal only at maturity or may represent only the right to receive payments of principal or interest on the underlying obligations, but not both. The value of these types of instruments may change more drastically than debt securities that pay both principal and interest during periods of changing interest rates. Principal only instruments generally increase in value if interest rates decline, but are also subject to the risk of prepayment. Interest only instruments generally increase in value in a rising interest rate environment when fewer of the underlying obligations are prepaid. Interest only instruments could lose their entire value in a declining interest rate environment if the underlying obligations are prepaid.

Unlike mortgage-related securities issued or guaranteed by the U.S. government or its agencies and instrumentalities, mortgage-related securities issued by private issuers do not have a government or government-sponsored entity guarantee (but may have other credit enhancement), and may, and frequently do, have less favorable collateral, credit risk or other characteristics. The portfolio may invest in other mortgage-related securities, including mortgage derivatives and structured securities. These securities typically are not secured by real property. Because these securities have imbedded leverage features, small changes in interest or prepayment rates may cause large and sudden price movements. These securities also can become illiquid and difficult to value in volatile or declining markets.

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 portfolio invests significantly in one region or country. These risks may include:

- Less information about non-U.S. issuers or markets may be available due to less rigorous disclosure or accounting standards or regulatory practices
- Many non-U.S. markets are smaller, less liquid and more volatile. In a changing market, the subadviser may not be able to sell the portfolio's securities at times, in amounts and at prices it considers reasonable
- Adverse effect of currency exchange rates or controls on the value of the portfolio's investments, or its ability to convert non-U.S. currencies to U.S. dollars
- The economies of non-U.S. countries may grow at slower rates than expected or may experience a downturn or recession
- Economic, political, regulatory and social developments may adversely affect the securities markets
- It may be difficult for the portfolio to pursue claims against a foreign issuer in the courts of a foreign country
- Withholding and other non-U.S. taxes may decrease the portfolio's return
- Some markets in which the portfolio may invest are located in parts of the world that have historically been prone to natural disasters that could result in a significant adverse impact on the economies of those countries and investments made in those countries
- A governmental entity may delay, or refuse or be unable to pay, interest or principal on its sovereign debt due to cash flow problems, insufficient foreign currency reserves, political considerations, the relative size of the governmental entity's debt position in relation to the economy or the failure to put in place economic reforms
- Investing in depositary receipts is subject to many of the same risks as investing directly in non-U.S. issuers

Market segment risk. To the extent the portfolio emphasizes, from time to time, investments in a market segment, the portfolio will be subject to a greater degree to the risks particular to that segment, and may experience greater market fluctuation, than a portfolio without the same focus. For example, industries in the financial segment, such as banks, insurance companies, broker-dealers and real estate investment trusts (REITs), may be sensitive to changes in interest rates and general economic activity and are generally subject to extensive government regulation.

Derivatives risk. Using derivatives exposes the portfolio to additional risks, may increase the volatility of the portfolio's net asset value and may not provide the expected result. Derivatives may have a leveraging effect on the portfolio, and they can disproportionately increase losses and reduce opportunities for gain. Some derivatives have the potential for unlimited loss, regardless of the size of the portfolio's initial investment. If changes in a derivative's value do not correspond to changes in the value of the portfolio's other investments or do not correlate well with the underlying assets, rate or index, the portfolio may not fully benefit from, or could lose money on, or could experience unusually high expenses as a result of, the derivative position. Derivatives involve the risk of loss if the counterparty defaults on its obligation. Certain derivatives may be less liquid, which may reduce the returns of the portfolio if it cannot sell or terminate the derivative at an advantageous time or price. The portfolio also may have to sell assets at inopportune times to satisfy its obligations. Some derivatives may involve the risk of improper valuation. Suitable derivatives may not be available in all circumstances or at reasonable prices and may not be used by the portfolio for a variety of

reasons. Recent legislation calls for new regulation of the derivatives markets. The extent and impact of the regulation is not yet fully known and may not be for some time. New regulation of derivatives may make them more costly, may limit their availability, or may otherwise adversely affect their value or performance. Risks associated with the use of derivatives are magnified to the extent that a large portion of the portfolio's assets are committed to derivatives in general or are invested in just one or a few types of derivatives.

Risks of initial public offerings. Companies involved in initial public offering (IPOs) generally have limited operating histories, and prospects for future profitability are uncertain. The market for IPO issuers has been volatile, and share prices of newly public companies have fluctuated significantly over short periods of time. Further, stocks of newly-public companies may decline shortly after the IPO. There is no assurance that the portfolio will have access to IPOs. The purchase of IPO shares may involve high transaction costs. Because of the price volatility of IPO shares, the portfolio may choose to hold IPO shares for a very short period of time. This may increase the turnover of the portfolio's portfolio and may lead to increased expenses to the portfolio, such as commissions and transaction costs. The market for IPO shares can be speculative and/or inactive for extended periods of time. There may be only a limited number of shares available for trading. The limited number of shares available for trading in some IPOs may also make it more difficult for the portfolio to buy or sell significant amounts of shares without an unfavorable impact on prevailing prices.

Leveraging risk. The value of your investment may be more volatile and other risks tend to be compounded if the portfolio 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 portfolio's underlying assets or creates investment risk with respect to a larger pool of assets than the portfolio would otherwise have, potentially resulting in the loss of all assets. Engaging in such transactions may cause the portfolio to liquidate positions when it may not be advantageous to do so to satisfy its obligations or meet segregation requirements.

Cash management risk. The value of the investments held by the portfolio for cash management or temporary defensive purposes may be affected by changing interest rates and by changes in credit ratings of the investments. To the extent that the portfolio has any uninvested cash, the portfolio would be subject to risk with respect to the depository institution holding the cash. If the portfolio holds cash uninvested, the portfolio will not earn income on the cash and the portfolio's yield will go down. During such periods, it may be more difficult for the portfolio to achieve its investment objectives.

Expense risk. Your actual costs of investing in the portfolio may be higher than the expenses shown in "Annual portfolio 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 portfolio expense ratios are more likely to increase when markets are volatile.

To learn more about the portfolio's investments and risks, you should obtain and read the statement of additional information. Please note that there are many other factors that could adversely affect your investment and that could prevent the portfolio from achieving its goals.

Disclosure of portfolio holdings

The portfolio's policies and procedures with respect to disclosure of the portfolio's securities are described in the statement of additional information.

Management

Investment adviser

Pioneer, the portfolio's investment adviser, oversees the portfolio's operations and supervises the portfolio's subadviser, which is responsible for the day-to-day management of the portfolio's portfolio.

Pioneer is an indirect, wholly owned subsidiary of UniCredit S.p.A., one of the largest banking groups in Italy. Pioneer is part of the global asset management group providing investment management and financial services to mutual funds, institutional and other clients. As of March 31, 2013, assets under management were approximately $207 billion worldwide, including over $67 billion in assets under management by Pioneer (and its U.S. affiliates).

Pioneer's main office is at 60 State Street, Boston, Massachusetts 02109.

The firm's U.S. mutual fund investment history includes creating in 1928 one of the first mutual funds.

Pioneer has received an order from the Securities and Exchange Commission that permits Pioneer, subject to the approval of the portfolio's Board of Trustees, to hire and terminate a subadviser that is not affiliated with Pioneer (an "unaffiliated subadviser") or to materially modify an existing subadvisory contract with an unaffiliated subadviser for the portfolio without shareholder approval. Pioneer retains the ultimate responsibility to oversee and recommend the hiring, termination and replacement of any unaffiliated subadviser.

Investment subadviser

AEW Capital Management, L.P. (AEW) is the portfolio's subadviser. AEW, which is located at World Trade Center East, Two Seaport Lane, Boston, Massachusetts 02210, provides real estate investment advice to public, corporate, union and government pension plans and endowments. As of December 31, 2012, AEW and its affiliates had approximately $48.2 billion in assets under management.

Portfolio management

Day-to-day management of the portfolio is the responsibility of Matthew A. Troxell, CFA (portfolio manager of the portfolio since 2004). Mr. Troxell is a managing director and senior portfolio manager at AEW with responsibility for construction and management of all the firm's publicly traded real estate equities portfolios. He has been employed at AEW as part of the REIT group since 1994 and has over 29 years of experience in investment analysis and portfolio management. Mr. Troxell is supported by three portfolio managers: J. Hall Jones, Jr., CFA, director of AEW (co-portfolio manager of the portfolio since 2012); Roman Ranocha, CFA, director of AEW (co-portfolio manager of the portfolio since 2012); and Jeffrey P. Caira, director of AEW (co-portfolio manager of the portfolio since 2012).

The portfolio's statement of additional information provides additional information about the portfolio managers' compensation, other accounts managed by the portfolio managers, and the portfolio managers' ownership of shares of the portfolio.

Management fee

The portfolio pays Pioneer a fee for managing the portfolio and to cover the cost of providing certain services to the portfolio. Pioneer's annual fee is equal to 0.80% of the portfolio's average daily net assets up to $500 million and 0.75% on average daily net assets over $500 million. The fee is normally accrued daily and paid monthly.

For the fiscal year ended December 31, 2012, the portfolio paid management fees (excluding waivers and/or assumption of expenses) equivalent to 80% of the portfolio's average daily net assets.

Pioneer, and not the portfolio, pays a portion of the fee it receives from the portfolio to AEW as compensation for AEW's subadvisory services to the portfolio.

A discussion regarding the basis for the Board of Trustees' approval of the management contract is available in the portfolio's annual report to shareholders for the period ended December 31, 2012.

A discussion regarding the basis for the Board of Trustees' approval of the subadvisory contract is available in the portfolio's annual report to shareholders for the period ended December 31, 2012.

Distributor and transfer agent

Pioneer Funds Distributor, Inc. is the portfolio's distributor. Pioneer Investment Management Shareholder Services, Inc. is the portfolio's transfer agent. The portfolio compensates the distributor and transfer agent for their services. The distributor and the transfer agent are affiliates of Pioneer.

Distribution plan

The portfolio has adopted a distribution plan for Class II shares in accordance with Rule 12b-1 under the Investment Company Act of 1940. Under the plan, the portfolio pays to Pioneer Funds Distributor, Inc. a distribution fee of 0.25% of the average daily net assets attributable to Class II shares. Because these fees are an ongoing expense, over time they increase the cost of an investment and the shares may cost more than shares that are subject to other types of sales charges.

Pricing of shares

Net asset value

The portfolio's net asset value is the value of its securities plus any other assets minus its accrued operating expenses and other liabilities. The portfolio calculates a net asset value for each class of shares every day the New York Stock Exchange is open when regular trading closes (normally 4:00 p.m. Eastern time). If the New York Stock Exchange closes at another time, the portfolio will calculate a net asset value for each class of shares as of the actual closing time. On days when the New York Stock Exchange is closed for trading, including certain holidays listed in the SAI, a net asset value is not calculated.

The portfolio generally values its equity securities and certain derivative instruments that are traded on an exchange using the last sale price on the principal exchange on which they are traded. Equity securities that are not traded on the date of valuation, or securities for which no last sale prices are available, are valued at the mean between the last bid and asked prices or, if both last bid and asked prices are not available, at the last quoted bid price. Last sale, bid and asked prices are provided by independent third party pricing services. In the case of equity securities not traded on an exchange, prices are typically determined by independent third party pricing services using a variety of techniques and methods.

The portfolio may use a fair value model developed by an independent pricing service to value non-U.S. equity securities.

To the extent that the portfolio invests in shares of other mutual funds that are not traded on an exchange, such shares of other mutual funds are valued at their net asset values as provided by those funds. The prospectuses for those funds explain the circumstances under which those funds will use fair value pricing methods and the effects of using fair value pricing methods.

The portfolio generally values debt securities and certain derivative instruments by using the prices supplied by independent third party pricing services. A pricing service may use market prices or quotations from one or more brokers or other sources, or may use a pricing matrix or other fair value methods or techniques to provide an estimated value of the security or instrument. A pricing matrix is a means of valuing a debt security on the basis of current market prices for other debt securities, historical trading patterns in the market for fixed income securities and/or other factors. Non-U.S. debt securities that are listed on an exchange will be valued at the bid price obtained from an independent third party pricing service.

The portfolio values short-term fixed income securities with remaining maturities of 60 days or less at amortized cost, unless circumstances indicate that using this method would not reflect an investment's value.

The valuations of securities traded in non-U.S. markets and certain fixed income securities will generally be determined as of the earlier closing time of the markets on which they primarily trade. When the portfolio holds securities or other assets that are denominated in a foreign currency, the portfolio will normally use the currency exchange rates as of 3:00 p.m. (Eastern time). Non-U.S. markets are open for trading on weekends and other days when the portfolio does not price its shares. Therefore, the value of the portfolio's shares may change on days when you will not be able to purchase or redeem portfolio shares.

When independent third party pricing services are unable to supply prices for an investment, or when prices or market quotations are considered by Pioneer to be unreliable, the value of that security may be determined using quotations from one or more broker-dealers. When such prices or quotations are not available, or when they are considered by Pioneer to be unreliable, the portfolio uses fair value methods to value its securities pursuant to procedures adopted by the Board of Trustees. The portfolio also may use fair value methods if it is determined that a significant event has occurred between the time at which a price is determined and the time at which the portfolio's net asset value is calculated. Because the portfolio may invest in securities rated below investment grade — some of which may be thinly traded and for which prices may not be readily available or may be unreliable — the portfolio may use fair value methods more frequently than funds that

primarily invest in securities that are more widely traded. Valuing securities using fair value methods may cause the net asset value of the portfolio's shares to differ from the net asset value that would be calculated only using market prices.

The prices used by the portfolio to value its securities may differ from the amounts that would be realized if these securities were sold and these differences may be significant, particularly for securities that trade in relatively thin markets and/or markets that experience extreme volatility.

Shareholder information

Additional payments to intermediaries

Pioneer and its affiliates may make payments to your financial intermediary in addition to other forms of compensation it may receive. These payments by Pioneer may provide your financial intermediary with an incentive to favor the portfolio over other funds or assist the distributor in its efforts to promote the sale of the portfolio's shares, including through Variable Contracts and Qualified Plans. Financial intermediaries include broker-dealers, banks (including bank trust departments), insurance companies, registered investment advisers, financial planners, retirement plan administrators and other types of intermediaries.

Pioneer makes these additional payments (sometimes referred to as "revenue sharing") to financial intermediaries out of its own assets, which may include profits derived from services provided to the portfolio. Pioneer may base these payments on a variety of criteria, such as the amount of sales or assets of the Pioneer funds (including the portfolio) attributable to the financial intermediary.

Not all financial intermediaries receive additional compensation and the amount of compensation paid varies for each financial intermediary. In certain cases, these payments may be significant. Pioneer determines which firms to support and the extent of the payments it is willing to make, generally choosing firms that have a strong capability to effectively distribute shares of the Pioneer funds and that are willing to cooperate with Pioneer's promotional efforts. To the extent intermediaries sell more shares of the Pioneer funds or retain shares of the Pioneer funds in their clients' accounts, Pioneer receives greater management and other fees due to the increase in the Pioneer funds' assets.

In addition to these payments, Pioneer may compensate financial intermediaries, including insurance companies that sponsor Variable Contracts, for providing certain administrative and other services. Although an intermediary may request additional compensation from Pioneer to offset costs incurred by the financial intermediary in providing these services, the intermediary may earn a profit on these payments, if the amount of the payment exceeds the intermediary's costs.

The compensation that Pioneer pays to financial intermediaries is discussed in more detail in the portfolio's statement of additional information. Intermediaries may categorize and disclose these arrangements differently than in the discussion above and in the statement of additional information. In addition to the payments by Pioneer, the insurance company sponsors of Variable Contracts that invest in the portfolio similarly may compensate financial intermediaries out of their own resources. You can ask your financial intermediary about any payments it receives, as well as about fees and/or commissions it charges.

Investments in shares of the portfolio

The portfolio may sell its shares directly to separate accounts established and maintained by insurance companies for the purpose of funding Variable Contracts and to Qualified Plans. Shares of the portfolio are sold at net asset value. Investments in the portfolio are expressed in terms of the full and fractional shares of the portfolio purchased. Investments in the portfolio are credited to an insurance company's separate account or Qualified Plan account immediately upon acceptance of the investment by the portfolio. Investments will be processed at the net asset value next determined after an order is received and accepted by the portfolio. The offering of shares of the portfolio may be suspended for a period of time and the portfolio reserves the right to reject any specific purchase order. Purchase orders may be refused if, in Pioneer's opinion, they are of a size or frequency that would disrupt the management of the portfolio.

Since you may not directly purchase shares of the portfolio, you should read the prospectus for your insurance company's Variable Contract to learn how to purchase a Variable Contract based on the portfolio.

The interests of Variable Contracts and Qualified Plans investing in the portfolio could conflict due to differences of tax treatment and other considerations. The portfolio currently does not foresee any disadvantages to investors arising out of the fact that the portfolio may offer its shares to insurance company separate accounts that serve as the investment vehicles for their Variable Contracts or that the portfolio may offer its shares to

Qualified Plans. Nevertheless, the portfolio's Board of Trustees intends to monitor events in order to identify any material irreconcilable conflicts which may possibly arise and to determine what action, if any, should be taken in response to such conflicts. If such a conflict were to occur, one or more insurance companies' separate accounts or Qualified Plans might be required to withdraw their investments in the portfolio and shares of another portfolio may be substituted. This might force the portfolio to sell securities at disadvantageous prices. In addition, the Board of Trustees may refuse to sell shares of the portfolio to any separate account or Qualified Plan or may suspend or terminate the offering of shares of the portfolio if such action is required by law or regulatory authority or is in the best interests of the shareholders of the portfolio.

Insurance companies and plan fiduciaries are required to notify the portfolio if the tax status of their separate account or Qualified Plan is revoked or challenged by the Internal Revenue Service. The portfolio may redeem any account of any shareholder whose qualification as a diversified segregated asset account or a Qualified Plan satisfying the requirements of Treasury Regulation §1.817-5 is revoked or challenged. The portfolio will not treat an investor as a Qualified Plan for this purpose unless the investor is among the categories specifically enumerated in Revenue Ruling 2007-58, 2007-2 C.B. 562. An insurance company separate account or Qualified Plan whose tax status is revoked or challenged by the Internal Revenue Service may be liable to the portfolio or Pioneer for losses incurred by the portfolio or Pioneer as a result of such action.

Selling

Shares of the portfolio may be sold on any business day. Portfolio shares are sold at net asset value next determined after receipt by the portfolio of a redemption request in good order. Sale proceeds will normally be forwarded by bank wire to the selling insurance company or Qualified Plan on the next business day after receipt of the sales instructions by the portfolio but in no event later than 7 days following receipt of instructions. The portfolio may suspend transactions in shares or postpone payment dates when trading on the New York Stock Exchange is closed or restricted, or when the Securities and Exchange Commission determines an emergency or other circumstances exist that make it impracticable for the portfolio to sell or value its investments.

Excessive trading

Frequent trading into and out of the portfolio can disrupt portfolio management strategies, harm portfolio performance by forcing the portfolio to hold excess cash or to liquidate certain portfolio securities prematurely and increase expenses for all investors, including long-term investors who do not generate these costs. An investor may use short-term trading as a strategy, for example, if the investor believes that the valuation of the portfolio's securities for purposes of calculating its net asset value does not fully reflect the then-current fair market value of those holdings. The portfolio discourages, and does not take any intentional action to accommodate, excessive and short-term trading practices, such as market timing. Although there is no generally applied standard in the marketplace as to what level of trading activity is excessive, we may consider trading in the portfolio's shares to be excessive for a variety of reasons, such as if a Variable Contract owner or plan participant provides instructions to the insurance company or plan administrator for:

- The sale of shares of the portfolio within a short period of time after the shares were purchased;
- Two or more purchases and redemptions within a short period of time; or
- A series of transactions that indicate a timing pattern or strategy.

The portfolio's Board of Trustees has adopted policies and procedures with respect to frequent purchases and redemptions of portfolio shares by investors. Because the insurance company aggregates the trading by Variable Contract owners, we are not able to monitor trading at the Variable Contract owner level. If we are advised by an insurance company that a Variable Contract owner, initiating transactions in the portfolio through a separate account that is the owner of record, has engaged in excessive short-term trading that we believe may be harmful to the portfolio, we will ask the insurance company to restrict the Variable Contract owner from placing further purchase orders in the portfolio. We may seek limitations on trading activity by Qualified Plans investing in the portfolio in similar circumstances. In determining whether to take such action, we seek

to act in a manner that is consistent with the best interests of the portfolio's shareholders. In order to prevent short-term trading in portfolios that primarily invest in non-U.S. securities, these portfolios use a fair value pricing service, as discussed under "Net asset value" in this prospectus.

While we use efforts that we believe are reasonable under the circumstances to detect excessive trading activity, there can be no assurance that our efforts will be successful or that market timers will not employ tactics designed to evade detection. If we are not successful, the return of an investor in a portfolio may be adversely affected. However, we are dependent upon the insurance companies that offer Variable Contracts and the administrators of the qualified plans that invest in the portfolios to monitor and restrict such activities. Consequently, an investment in a portfolio may involve the risk that certain investors will engage in short-term or excessive trading.

The portfolio may reject any purchase or exchange order before its acceptance or the issuance of shares, or request that the insurance company or plan administrator restrict transaction activity by a Variable Contract owner, for any reason, without prior notice, including transactions that the portfolio believes are requested on behalf of market timers. The portfolio reserves the right to reject any purchase request by a Qualified Plan or insurance company if the portfolio believes that any combination of trading activity in the account or related accounts is potentially disruptive to the portfolio. A prospective investor whose purchase order is rejected will not achieve the investment results, whether gain or loss, that would have been realized if the order were accepted and an investment made in the portfolio. The portfolio and its shareholders do not incur any gain or loss as a result of a rejected order. The portfolio may impose further restrictions on trading activities by market timers in the future.

Distributions and taxes

Shares of the portfolio are held by life insurance company separate accounts that fund Variable Contracts and by certain Qualified Plans. Owners of Variable Contracts should read the prospectus of their insurance company's Variable Contract for a discussion of the tax status of a Variable Contract, including the tax consequences of withdrawals or other payments, and should keep all statements received from the insurance company or the portfolio to assist in personal recordkeeping. Participants in a Qualified Plan should consult their tax advisers regarding the tax consequences of participating in and receiving distributions or other payments relating to such plans.

The portfolio is treated as a separate entity for U.S. federal income tax purposes. The portfolio has elected to be treated, and has qualified and intends to continue to qualify each year, as a regulated investment company under Subchapter M of the Internal Revenue Code of 1986, as amended (the "Code"). In order to so qualify, the portfolio generally must satisfy certain requirements relating to the sources of its income and the diversification of its assets. If the portfolio qualifies as a regulated investment company and meets certain distribution requirements, it generally will not be subject to federal income tax on any net investment income and net realized capital gains that are distributed to its shareholders.

Under the Code, the portfolio's dividends and distributions of ordinary income or of net short-term capital gain that are paid to insurance company separate accounts or to Qualified Plans are generally treated as dividend income; distributions of net long-term capital gain in excess of net short-term capital loss are generally treated as long-term capital gain. Dividends and capital gain distributions are treated as received by the insurance company or Qualified Plan rather than by the owner of the Variable Contract or the plan participant. Insurance companies and Qualified Plans should consult their own tax advisers regarding the tax treatment of dividends or capital gain distributions they receive from the portfolio.

In addition to satisfying the requirements applicable to regulated investment companies described above, the portfolio also intends to satisfy the diversification requirements applicable to separate accounts of insurance companies. If the portfolio qualifies as a regulated investment company and only sells its shares to separate accounts and to certain other permitted investors, including Qualified Plans, then the separate accounts invested in the portfolio will be allowed to look through to the portfolio's investments in testing their compliance with the diversification requirements. If the portfolio fails to meet the diversification requirements applicable to separate accounts or fails to qualify as a regulated investment company, or if the portfolio's shares are sold to any investor other than certain permitted investors, then that look-through treatment would not be available and separate accounts invested in the portfolio might fail to satisfy the diversification requirements, and Variable Contracts invested in those separate accounts might not qualify for their expected federal income tax treatment. More specific information on these diversification requirements is contained in the insurance company's separate account prospectus and in the SAI.

Distributions

The portfolio generally pays any distributions of net short- and long-term capital gains in June. The portfolio generally pays dividends from any net investment income other than net short- and long-term capital gains quarterly during March, June, September and December. The portfolio may also pay dividend and capital gain distributions at other times if necessary for the portfolio to avoid federal income or excise tax.

Financial highlights

The financial highlights table helps you understand the portfolio's financial performance. Certain information reflects financial results for a single share of the portfolio. The total returns in the table represent the rate that you would have earned on an investment in the portfolio (assuming reinvestment of all dividends and distributions). The information below has been audited by Ernst & Young LLP, the independent registered public accounting firm for the fiscal periods shown, whose report is included in the portfolio's annual report along with the portfolio's financial statements. The annual report is available upon request.

Pioneer Real Estate Shares VCT Portfolio

Class II

	Year Ended 12/31/12	Year Ended 12/31/11	Year Ended 12/31/10	Year Ended 12/31/09	Year Ended 12/31/08
Net asset value, beginning of period	$ 17.54	$ 16.35	$ 13.03	$ 10.38	$ 23.45
Increase (decrease) from investment operations:					
Net investment income	$ 0.21	$ 0.40	$ 0.19	$ 0.33	$ 0.45
Net realized and unrealized gain (loss) on investments	2.60	1.18	3.49	2.78	(6.86)
Net increase (decrease) from investment operations	$ 2.81	$ 1.58	$ 3.68	$ 3.11	$ (6.41)
Distributions to shareowners:					
Net investment income	(0.21)	(0.39)	(0.36)	(0.33)	(0.45)
Net realized gain	(0.21)	—	—	—	(5.96)
Tax return of capital	—	—	—	(0.13)	(0.25)
Net increase (decrease) in net asset value	$ 2.39	$ 1.19	$ 3.32	$ 2.65	$ (13.07)
Net asset value, end of period	$ 19.93	$ 17.54	$ 16.35	$ 13.03	$ 10.38
Total return*	16.09%	9.76%	28.53%	31.56%	(38.35)%
Ratio of net expenses to average net assets†	1.26%	1.28%	1.27%	1.33%	1.30%
Ratio of net investment income to average net assets†	2.16%	2.24%	1.45%	3.21%	2.41%
Portfolio turnover rate	5%	10%	11%	30%	22%
Net assets, end of period (in thousands)	$35,500	$35,435	$38,057	$39,638	$32,712

* Assumes initial investment at net asset value at the beginning of each period, reinvestment of all distributions and the complete redemption of the investment at net asset value at the end of each period.

† Ratios with no reduction for fees paid indirectly.

NOTE: The above financial highlights do not reflect the deduction of non-portfolio expenses associated with variable insurance products, such as mortality and expense risk charges, separate account charges, and sales charges.

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Pioneer Variable Contracts Trust

Pioneer Real Estate Shares VCT Portfolio
Class II Shares

You can obtain more free information about the portfolio by writing to Pioneer Investment Management Shareholder Services, Inc., 60 State Street, Boston, Massachusetts 02109. You may also call **1-800-225-6292** for information about the portfolio, to request copies of the portfolio's statement of additional information and shareowner reports, and to make other inquiries. The portfolio's statement of additional information and shareowner reports are available, free of charge, on the Pioneer website at www.pioneerinvestments.com.

Shareowner reports
Annual and semiannual reports to shareowners, and quarterly reports filed with the Securities and Exchange Commission, provide additional information about the portfolio's investments. The annual report discusses market conditions and investment strategies that significantly affected the portfolio's performance during its last fiscal year.

Statement of additional information
The statement of additional information provides more detailed information about the portfolio.

The statement of additional information, and the independent registered public accounting firm's report and financial statements in the portfolio's annual report to shareowners, are incorporated by reference into this prospectus.

You can also review and copy the portfolio's shareowner reports, prospectus and statement of additional information at the Securities and Exchange Commission's Public Reference Room in Washington, D.C. Call 1-202-551-8090 for information. The Commission charges a fee for copies. You can get the same information free from the Commission's EDGAR database on the Internet (http://www.sec.gov). You may also e-mail requests for these documents to publicinfo@sec.gov or make a request in writing to the Commission's Public Reference Section, Washington, D.C. 20549-1520.

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PIONEER Investments®

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