

SUMMARY PROSPECTUS

October 30, 2020

Share Class	Inst	I-2	I-3	A
Ticker	PKAIX	PKAPX	—	PKAAX

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, paper copies of the Fund's annual and semi-annual shareholder reports will no longer be sent by mail, unless you specifically request paper copies of the reports from the Fund or from your financial intermediary, such as a broker-dealer or bank. Instead, the reports will be made available on the Fund's website, pimco.com/literature, and you will be notified by mail each time a report is posted and provided with a website link to access the report.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. You may elect to receive shareholder reports and other communications from the Fund electronically by visiting pimco.com/edelivery or by contacting your financial intermediary, such as a broker-dealer or bank.

You may elect to receive all future reports in paper free of charge. If you own these shares through a financial intermediary, such as a broker-dealer or bank, you may contact your financial intermediary to request that you continue to receive paper copies of your shareholder reports. If you invest directly with the Fund, you can inform the Fund that you wish to continue receiving paper copies of your shareholder reports by calling 888.87.PIMCO (888.877.4626). Your election to receive reports in paper will apply to all funds held with the fund complex if you invest directly with the Fund or to all funds held in your account if you invest through a financial intermediary, such as a broker-dealer or bank.

Before you invest, you may want to review the Fund's prospectus, which, as supplemented, contains more information about the Fund and its risks. You can find the Fund's prospectus, reports to shareholders and other information about the Fund online at <http://investments.pimco.com/prospectuses>. You can also get this information at no cost by calling 888.87.PIMCO or by sending an email request to piroprocess@dstsystems.com. The Fund's prospectus and Statement of Additional Information, both dated October 30, 2020, as supplemented, are incorporated by reference into this Summary Prospectus.

Investment Objective

The Fund seeks long-term capital appreciation.

Fees and Expenses of the Fund

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. In addition to the fees and expenses described below, you may also be required to pay brokerage commissions on purchases and sales of Institutional Class, I-2 or I-3 shares of the Fund. You may qualify for sales charge discounts if you and your family invest, or agree to invest in the future, at least \$50,000 in Class A shares of eligible funds offered by PIMCO Equity Series and PIMCO Funds. More information about these and other discounts is available in the "Classes of Shares" section on page 44 of the Fund's prospectus, Appendix B to the Fund's prospectus (Financial Firm-Specific Sales Charge Waivers and Discounts) or from your financial professional.

Shareholder Fees (fees paid directly from your investment):

	Inst Class	I-2	I-3	Class A
Maximum Sales Charge (Load) Imposed on Purchases (as a percentage of offering price)	None	None	None	3.75%
Maximum Deferred Sales Charge (Load) (as a percentage of the lower of the original purchase price or redemption price)	None	None	None	1.00%

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment):

	Inst Class	I-2	I-3	Class A
Management Fees ⁽¹⁾	0.40%	0.50%	0.60%	0.55%
Distribution and/or Service (12b-1) Fees	N/A	N/A	N/A	0.25%
Other Expenses ⁽²⁾	0.02%	0.02%	0.02%	0.02%
Total Annual Fund Operating Expenses	0.42%	0.52%	0.62%	0.82%
Fee Waiver and/or Expense Reimbursement ⁽³⁾⁽⁴⁾	(0.01%)	(0.01%)	(0.06%)	(0.01%)
Total Annual Fund Operating Expenses After Fee Waiver and/or Expense Reimbursement	0.41%	0.51%	0.56%	0.81%

- Expense information in the table has been restated to reflect current Management Fees.
- "Other Expenses" include interest expense of 0.01% and expenses incurred by the Fund in the normal course of its operations. Such expenses are borne by the Fund separately from the management fees paid to Pacific Investment Management Company LLC ("PIMCO"). Excluding interest expense, Total Annual Fund Operating Expenses After Fee Waiver and/or Expense Reimbursement are 0.40%, 0.50%, 0.55% and 0.80% for Institutional Class, I-2, I-3 and Class A shares, respectively.
- PIMCO has contractually agreed, through October 31, 2021, to waive a portion of the Fund's supervisory and administrative fees, or reimburse the Fund, to the extent that the Fund's organizational expenses, pro rata share of expenses related to obtaining or maintaining a Legal Entity Identifier and pro rata share of Trustee fees exceed 0.0049% (the "Expense Limit") (calculated as a percentage of average daily net assets attributable to each class). This Expense Limitation Agreement will automatically renew for one-year terms unless PIMCO provides written notice to PIMCO Equity Series at least 30 days prior to the end of the then current term. In any month in which the investment advisory contract or supervision and administration agreement is in effect, PIMCO is entitled to reimbursement by the Fund of any portion of the supervisory and administrative fee waived or reimbursed as set forth above (the "Reimbursement Amount") during the previous thirty-six months from the time of the waiver, provided that such amount paid to PIMCO will not: 1) together with any organizational expenses, pro rata share of expenses related to obtaining or maintaining a Legal Entity Identifier and pro rata Trustee fees, exceed, for such month, the Expense Limit (or the amount of the expense limit in place at the time the amount being recouped was originally waived if lower than the Expense Limit); 2) exceed the total Reimbursement Amount; or 3) include any amounts previously reimbursed to PIMCO.
- PIMCO has contractually agreed, through October 31, 2021, to reduce its supervisory and administrative fee for the Fund's I-3 shares by 0.05% of the average daily net assets attributable to I-3 shares of the Fund. This Fee Waiver Agreement renews annually unless terminated by PIMCO upon at least 30 days' prior notice to the end of the contract term.

Example. The Example is intended to help you compare the cost of investing in Institutional Class, I-2 or Class A shares of the Fund with the costs of investing in other mutual funds. The Example assumes that you invest \$10,000 in the noted class of shares for the time periods indicated, and then redeem all your shares at the end of those periods. The Example also assumes that your investment has a 5% return each year and that the Fund's operating expenses remain the same. Investors may pay brokerage commissions on their purchases and sales of Institutional Class, I-2 or I-3 shares of the Fund, which are not reflected in the Example. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

PIMCO RAE US Fund

If you redeem your shares at the end of each period:

	1 Year	3 Years	5 Years	10 Years
Institutional Class	\$42	\$134	\$234	\$529
I-2	\$52	\$166	\$290	\$652
I-3	\$57	\$192	\$340	\$769
Class A	\$455	\$626	\$812	\$1,350

If you do not redeem your shares:

	1 Year	3 Years	5 Years	10 Years
Class A	\$455	\$626	\$812	\$1,350

Portfolio Turnover

The Fund pays transaction costs 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 the Annual Fund Operating Expenses or in the Example tables, affect the Fund’s performance. During the most recent fiscal year, the Fund’s portfolio turnover rate was 34% of the average value of its portfolio.

Principal Investment Strategies

The Fund seeks to achieve its investment objective by investing under normal circumstances at least 80% of its assets in securities of companies economically tied to the United States (for purposes of this section only, “U.S. companies”). Specifically, under normal circumstances, the Fund will obtain exposure to a portfolio of stocks of U.S. companies (“RAE US Portfolio”) through investment in the securities that comprise the RAE US Portfolio. The stocks are selected by the Fund’s sub-adviser, Research Affiliates (“Sub-Adviser”), from a broad universe of companies which satisfy certain liquidity and capacity requirements.

The Sub-Adviser uses the RAE® methodology for portfolio construction. The RAE® methodology is a rules-based model that selects stocks using quantitative signals that indicate higher expected returns, e.g., value, quality, and momentum. The model then weights selected stocks using their fundamental measures of company size, e.g., sales, cash flow, dividends and book value. The Sub-Adviser applies the RAE® methodology to the large and mid-sized U.S. companies as determined by cumulative fundamental measures of company size. The fundamental weights of U.S. companies are sorted in descending order where the top cumulative 86% weights are eligible as large and mid-sized companies. Actual stock positions in the RAE US Portfolio, which drift apart from target weights as market prices change, are rebalanced to target weights periodically. The RAE® methodology’s systematic portfolio rebalancing reflects a value orientation. Portfolio managers do not have discretion with respect to the allocations determined by the RAE® methodology. The RAE® methodology is not updated according to any predetermined schedule.

The Sub-Adviser provides investment advisory services in connection with the Fund’s use of the RAE US Portfolio by, among other things, providing PIMCO, and the Portfolio Implementer where applicable, with the constituents and target weights in the RAE US Portfolio. The Fund seeks to remain invested in the securities that comprise the RAE US Portfolio even when the value of the RAE US Portfolio is declining.

The Fund may invest, without limitation, in equity and equity-related securities, including common and preferred securities. Equity-related securities include securities having an equity component (e.g., hybrids, bank

capital) and equity derivatives. With respect to investments in equity securities, there is no limitation on the market capitalization range of the issuers in which the Fund may invest. The Fund may also invest in derivative instruments, such as options, forwards, futures contracts, options on futures and swap agreements, consistent with its investment objective. The Fund may also invest in real estate investment trusts (“REITs”). The Fund may purchase or sell securities on a when-issued, delayed delivery or forward commitment basis. The Fund may also enter into reverse repurchase agreements and lend portfolio securities.

Principal Risks

It is possible to lose money on an investment in the Fund. The principal risks of investing in the Fund, which could adversely affect its net asset value, yield and total return, are listed below.

Equity Risk: the risk that the value of equity securities, such as common stocks and preferred securities, may decline due to general market conditions which are not specifically related to a particular company or to factors affecting a particular industry or industries. Equity securities generally have greater price volatility than fixed income securities

Value Investing Risk: a value stock may decrease in price or may not increase in price as anticipated by the Sub-Adviser if it continues to be undervalued by the market or the factors that the portfolio manager believes will cause the stock price to increase do not occur

Market Risk: the risk that the value of securities owned by the Fund may go up or down, sometimes rapidly or unpredictably, due to factors affecting securities markets generally or particular industries

Issuer Risk: the risk that the value of a security may decline for a reason directly related to the issuer, such as management performance, financial leverage and reduced demand for the issuer’s goods or services

Credit Risk: the risk that the Fund could lose money if the counterparty to a derivative contract is unable or unwilling, or is perceived (whether by market participants, rating agencies, pricing services or otherwise) as unable or unwilling, to meet its financial obligations

Real Estate Risk: the risk that the Fund’s investments in Real Estate Investment Trusts (“REITs”) or real estate-linked derivative instruments will subject the Fund to risks similar to those associated with direct ownership of real estate, including losses from casualty or condemnation, and changes in local and general economic conditions, supply and demand, interest rates, zoning laws, regulatory limitations on rents, property taxes and operating expenses. The Fund’s investments in REITs or real estate-linked derivative instruments subject it to management and tax risks. In addition, privately traded REITs subject the Fund to liquidity and valuation risk

Liquidity Risk: the risk that a particular investment may be difficult to purchase or sell and that the Fund may be unable to sell illiquid investments at an advantageous time or price or achieve its desired level of exposure to a certain sector

Leveraging Risk: the risk that certain transactions of the Fund, such as reverse repurchase agreements, loans of portfolio securities, and the use of when-issued, delayed delivery or forward commitment transactions, or derivative instruments, may give rise to leverage, magnifying gains and losses and causing the Fund to be more volatile than if it had not been leveraged. This means that leverage entails a heightened risk of loss

Management Risk: the risk that the investment techniques and risk analyses applied by the Sub-Adviser, including the use of quantitative models or methods, will not produce the desired results and that actual or

potential conflicts of interest, legislative, regulatory, or tax restrictions, policies or developments may affect the investment techniques available to the Sub-Adviser and the individual portfolio manager in connection with managing the Fund and may cause the Sub-Adviser to restrict or prohibit participation in certain investments. There is no guarantee that the investment objective of the Fund will be achieved

Derivatives Risk: the risk of investing in derivative instruments (such as futures, swaps and structured securities), including leverage, liquidity, interest rate, market, credit and management risks and valuation complexity. Changes in the value of a derivative may not correlate perfectly with, and may be more sensitive to market events than, the underlying asset, rate or index, and the Fund could lose more than the initial amount invested. The Fund's use of derivatives may result in losses to the Fund, a reduction in the Fund's returns and/or increased volatility. Over-the-counter ("OTC") derivatives are also subject to the risk that a counterparty to the transaction will not fulfill its contractual obligations to the other party, as many of the protections afforded to centrally-cleared derivative transactions might not be available for OTC derivatives. The primary credit risk on derivatives that are exchange-traded or traded through a central clearing counterparty resides with the Fund's clearing broker, or the clearinghouse. Changes in regulation relating to a mutual fund's use of derivatives and related instruments could potentially limit or impact the Fund's ability to invest in derivatives, limit the Fund's ability to employ certain strategies that use derivatives and/or adversely affect the value of derivatives and the Fund's performance

Model Risk: the risk that the Fund's investment models used in making investment allocation decisions may not adequately take into account certain factors or may rely on inaccurate data inputs, may contain design flaws or faulty assumptions, and may rely on incomplete or inaccurate data, any of which may result in a decline in the value of an investment in the Fund

Please see "Description of Principal Risks" in the Fund's prospectus for a more detailed description of the risks of investing in the Fund. An investment in the Fund is not a deposit of a bank and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

Performance Information

The performance information shows summary performance information for the Fund in a bar chart and an Average Annual Total Returns table. The information provides some indication of the risks of investing in the Fund by showing changes in its performance from year to year and by showing how the Fund's average annual returns compare with the returns of a primary and a secondary broad-based securities market index.

A privately offered fund managed by the Fund's Sub-Adviser was reorganized into the Fund as of the date the Fund commenced operations (June 5, 2015). This privately offered fund was organized on October 28, 2004 and commenced operations on December 22, 2004 and had an investment objective and strategies that were, in all material respects, the same as those of the Fund, and was managed by the Fund's Sub-Adviser in a manner that, in all material respects, complied with the investment guidelines and restrictions of the Fund. However, the privately offered fund was not registered as an investment company under the 1940 Act, and the privately offered fund was not subject to certain investment limitations, diversification requirements, liquidity requirements, and other restrictions imposed by the 1940 Act and the Internal Revenue Code of 1986 which, if applicable, may have adversely affected its performance.

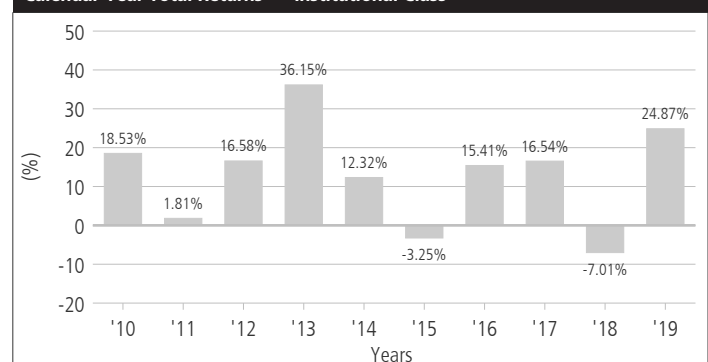
The Fund's performance for periods prior to the commencement of operations is that of the privately offered fund (net of actual fees and expenses charged to individual privately offered fund accounts in the aggregate). The performance of the privately offered fund has not been restated to reflect the fees, estimated expenses and fee waivers and/or expense limitations applicable to each class of shares of the Fund. If the performance of the privately offered fund had been restated to reflect the applicable fees and expenses of each class of shares of the Fund, the performance may have been higher or lower than the performance shown in the bar chart and Average Annual Total Returns table below. For periods following the Fund's commencement of operations on June 5, 2015, the performance of each class of shares differs as a result of the different levels of fees and expenses applicable to each class of shares, and performance for Class A shares reflects the impact of sales charges. Absent any applicable fee waivers and/or expense limitations, performance would have been lower. The I-3 shares of the Fund have not commenced operations as of the date of this prospectus. *The Fund's past performance, before and after taxes, is not necessarily an indication of how the Fund will perform in the future.*

The Fund measures its performance against a primary benchmark and a secondary benchmark. The Fund's primary benchmark is the Russell 1000® Value Index.

The Russell 1000® Value Index, a subset of the Russell 1000® Index, measures the performance of large and mid-capitalization value sectors of the U.S. equity market, as defined by FTSE Russell. The S&P 500 Index is an unmanaged market index generally considered representative of the stock market as a whole. The S&P 500 Index is composed of 500 selected common stocks that represent approximately two-thirds of the total market value of all U.S. common stocks. The S&P 500 Index focuses on the large-cap segment of the U.S. equities market.

Performance for the Fund is updated daily and quarterly and may be obtained as follows: daily and quarterly updates on the net asset value and performance page at <https://www.pimco.com/en-us/product-finder>.

Calendar Year Total Returns — Institutional Class*



*The year-to-date return as of September 30, 2020 is -11.22%. For the periods shown in the bar chart, the highest quarterly return was 12.94% in the Q1 2013, and the lowest quarterly return was -14.96% in the Q3 2011.

PIMCO RAE US Fund

Average Annual Total Returns (for periods ended 12/31/2019)

	1 Year	5 Years	10 Years
Institutional Class Return Before Taxes	24.87%	8.61%	12.51%
Institutional Class Return After Taxes on Distributions ⁽¹⁾	23.38%	7.22%	11.79%
Institutional Class Return After Taxes on Distributions and Sales of Fund Shares ⁽¹⁾	15.64%	6.52%	10.35%
I-2 Return Before Taxes	24.74%	8.50%	12.46%
Class A Return Before Taxes	19.73%	7.38%	11.88%
Russell 1000® Value Index (reflects no deductions for fees, expenses or taxes)	26.54%	8.29%	11.80%
S&P 500 Index (reflects no deductions for fees, expenses or taxes)	31.49%	11.70%	13.56%

¹ After-tax returns are calculated using the highest historical individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown, and the after-tax returns shown are not relevant to investors who hold their Fund shares through tax-deferred arrangements, such as 401(k) plans or individual retirement accounts. In some cases the return after taxes may exceed the return before taxes due to an assumed tax benefit from any losses on a sale of Fund shares at the end of the measurement period. After-tax returns are for Institutional Class shares only. After-tax returns for other classes will vary.

Investment Adviser/Portfolio Managers



PIMCO serves as the investment adviser for the Fund. Research Affiliates serves as the Fund's sub-adviser. Parametric Portfolio Associates LLC serves as the Fund's portfolio implementer. The Fund's portfolio is jointly and primarily managed by Rob Arnott and Chris Brightman. Mr.

Arnott is Chairman and Founder of Research Affiliates. Mr. Brightman is Chief Investment Officer of Research Affiliates. Messrs. Arnott and Brightman have jointly and primarily managed the Fund since its inception in June 2015.

Purchase and Sale of Fund Shares

Fund shares may be purchased or sold (redeemed) on any business day (normally any day when the New York Stock Exchange ("NYSE") is open). Generally, purchase and redemption orders for Fund shares are processed at the net asset value ("NAV") next calculated after an order is received by the Fund.

Institutional Class, I-2 and I-3

The minimum initial investment for Institutional Class, I-2 and I-3 shares of the Fund is \$1 million, except that the minimum initial investment may be modified for certain financial firms that submit orders on behalf of their customers.

You may sell (redeem) all or part of your Institutional Class, I-2 and I-3 shares of the Fund on any business day. If you are the registered owner of the shares on the books of the Fund, depending on the elections made on the Account Application, you may sell by:

- Sending a written request by regular mail to:
PIMCO Equity Series
P.O. Box 219024, Kansas City, MO 64121-9024
or by overnight mail to:

PIMCO Equity Series c/o DST Asset Manager Solutions, Inc.
430 W 7th Street, STE 219024, Kansas City, MO 64105-1407

- Calling us at 1.888.87.PIMCO and a Shareholder Services associate will assist you
- Sending a fax to our Shareholder Services department at 1.816.421.2861
- Sending an e-mail to piprocess@dstsystems.com

Class A

The minimum initial investment for Class A shares of the Fund is \$1,000. The minimum subsequent investment for Class A shares is \$50. The minimum initial investment may be modified for certain financial firms that submit orders on behalf of their customers. You may purchase or sell (redeem) all or part of your Class A shares through a broker-dealer, or other financial firm, or, if you are the registered owner of the shares on the books of the Fund, by regular mail to PIMCO Equity Series, P.O. Box 219294, Kansas City, MO 64121-9294 or overnight mail to PIMCO Equity Series, c/o DST Asset Manager Solutions, Inc., 430 W. 7th Street, STE 219294, Kansas City, MO 64105-1407. The Fund reserves the right to require payment by wire or U.S. Bank check in connection with accounts opened directly with the Fund by Account Application.

Tax Information

The Fund's distributions are generally taxable to you as ordinary income, capital gains, or a combination of the two, unless you are investing through a tax-deferred arrangement, such as a 401(k) plan or an individual retirement account, in which case distributions may be taxable upon withdrawal.

Payments to Broker-Dealers and Other Financial Firms

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

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