December 31, 2017

*Annual Report*

# T. Rowe Price Institutional Large-Cap Growth Fund

T.RowePrice®
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## T. Rowe Price Institutional Large-Cap Growth Fund

### Highlights

- The major U.S. equity indexes reached record highs in 2017, supported by solid corporate earnings reports and steady economic growth. Information technology shares outpaced most other segments, with many leading companies recording impressive gains in revenues and earnings during the year.
- The Institutional Large-Cap Growth Fund outperformed its benchmark, the Russell 1000 Growth Index, and its Lipper peer group for the 12-month period ended December 31, 2017.
- Stock selection in the information technology, consumer discretionary, and health care sectors added the most to relative results during the year, and the portfolio also benefited from largely avoiding underperforming areas of the market such as consumer staples stocks.
- After a year of strong market results, it has become more difficult to find stocks that offer long-term growth potential at an attractive price, but the tax reform package that was passed at the end of 2017 has the potential to extend the current economic expansion and boost corporate earnings.

## Manager's Letter

T. Rowe Price Institutional Large-Cap Growth Fund

# Dear Investor

We are happy to report that the Institutional Large-Cap Growth Fund recorded strong results in the 12-month period ended December 31, 2017, and outperformed its benchmark. The environment was beneficial to our style of investing as large-cap stocks outperformed small-caps, and growth stocks soundly outpaced value. The major U.S. equity indexes reached record highs in 2017, supported by solid corporate earnings reports and steady economic growth. The passage of tax reform in December delivered a boost to stocks in the fourth quarter and raised expectations that the market rally could continue in 2018. Stock selection in information technology, consumer discretionary, and health care helped drive the fund's outperformance for the year, and our sector weightings were also positive.

**Performance Comparison**

| | Total Return | |
|---|---|---|
| Periods Ended 12/31/17 | 6 Months | 12 Months |
| Institutional Large-Cap Growth Fund | 15.21% | 37.82% |
| Russell 1000 Growth Index | 14.23 | 30.21 |
| Lipper Large-Cap Growth Funds Index | 12.48 | 31.85 |

The Institutional Large-Cap Growth Fund returned 37.82% in the 12-month period ended December 31, 2017, compared with 30.21% for the Russell 1000 Growth Index and 31.85% for the Lipper Large-Cap Growth Funds Index, which measures the performance of similarly managed funds. The fund also outperformed its benchmarks during the most recent six months.

Your fund compared favorably versus its peer group during longer time periods. Lipper ranked the Institutional Large-Cap Growth Fund in the top two percentile among large-cap growth funds for the 3-, 5-, and 10-year periods ended December 31, 2017. (Based on cumulative total return, Lipper ranked the fund 22 of 638, 7 of 564, 9 of 524, and 6 of 377 large-cap growth funds for the 1-, 3-, 5-, and 10-year periods ended December 31, 2017, respectively. *Past performance cannot guarantee future results.*)

## Market and Economic Environment

The U.S. economy continued to expand in 2017 as gross domestic product rebounded from a weak first quarter. The U.S. labor market has been healthy, with the national unemployment rate reaching a 17-year low of 4.1% in the fourth quarter. Inflation data showed some signs of normalizing after very weak readings earlier in 2017. As a result of the strengthening economy, the Federal Reserve raised short-term interest rates three times in 2017 in moves that were widely expected by the equity markets, although longer-term interest rates were little changed for the year.

In the large-cap growth universe, as measured by the Russell 1000 Growth Index, most sectors produced strong returns. Information technology shares far outpaced most other segments, with many leading companies recording impressive gains in revenues and earnings during the year. Financial stocks also slightly outperformed the broader growth index. Industrials and business services, consumer discretionary, and health care stocks recorded strong results. Conversely, telecommunication services and energy stocks were the worst-performing sectors for the year. Although oil prices rose in 2017, energy shares underperformed as oil production cuts by OPEC and some non-OPEC nations proved inadequate to offset increases in the U.S. The sector was also hurt by hurricane-related production and distribution disruptions in and near the Gulf of Mexico.

## Portfolio Review

Stock selection in the information technology sector was our largest contributor to results relative to the Russell 1000 Growth Index for the 12-month period, and our overweight position in the sector also added value. Several of the tech names we mentioned in our previous letter continued to produce strong results for the full year. Most notably, shares of our out-of-benchmark positions in Chinese Internet companies **Alibaba Group Holding** and **Tencent Holdings** recorded gains of about 96% and 112%, respectively, while electronic payments provider **PayPal Holdings** was up 86%. Alibaba, China's largest e-commerce company, and social media platform and gaming company Tencent continued to demonstrate considerable growth potential. PayPal meanwhile recorded strong total payment volume and revenue growth and announced several new partnerships to expand the use of its services. While we reduced our position in PayPal after its strong results, we have maintained an overweight position in the company. (Please refer to the fund's portfolio of investments for a complete list of our holdings and the amount each represents in the portfolio.)

**ServiceNow** was also a strong outperformer as its overall growth metrics stayed healthy throughout the year. The company offers cloud computing solutions for businesses and has the potential to continue to take additional market share in its core IT service business and expand to other areas.

## Portfolio Characteristics

| As of 12/31/17 | Institutional Large-Cap Growth Fund | Russell 1000 Growth Index |
|---|---|---|
| Earnings Growth Rate (annualized) | | |
| Past 5 Years | 11.9% | 11.1% |
| Projected 5 Years* | 14.1 | 11.2 |
| Return on Equity (annualized) | | |
| Past 5 Years | 17.0 | 24.1 |
| Long-Term Debt as Percent of Capital | 35.3 | 42.8 |
| P/E Ratio (12-month forward projected earnings)* | 25.1X | 23.3X |

*Source for data: IBES. Statistics are based on the companies in the fund's portfolio and are not a projection of future fund performance.

Stock selection was also positive in the consumer discretionary sector, led by **Amazon.com**. Amazon continued to beat revenue expectations in its retail business while also seeing stellar growth in its cloud computing operation, Amazon Web Services. Investors were pleased by the integration of Amazon's acquisition of Whole Foods, and the company continued to impress with its well-executed moves into advertising, video streaming, and logistics. The company is our largest position in absolute terms and second-largest overweight relative to the index. In addition, our non-benchmark position in electric car maker **Tesla** contributed to relative results, although production delays for its Model 3 vehicle caused a sell-off late in the year. We maintain a positive outlook on the stock as we believe Tesla can work through its manufacturing challenges and ramp up production in the coming months.

Our stock selection in health care also produced good relative returns, led by **Intuitive Surgical** and **Vertex Pharmaceuticals**. The companies both received positive clinical results from products they are developing, which drove their continued outperformance. Intuitive Surgical received encouraging results for its new catheter technology, and the company has already had success with its robotic da Vinci surgical system. Vertex received successful results from clinical trials for its new cystic fibrosis drug Orkambi in the first half of the year, and the stock received a further boost in July after the company reported that its triple combo regimen had showed promise in fighting forms of cystic fibrosis that have previously been resistant to treatment.

Aerospace and defense company **Boeing** was one of the fund's largest contributors on an absolute basis, and our overweight position aided results in the industrials and business services sector. Boeing's shares have been supported by solid sales reports and improving profit margins and free cash flows. Additionally, the company has started to realize the cost benefits of its improved manufacturing processes and renegotiated supply contracts.

Our ability to avoid underperforming areas of the market also helped the fund's results. We had a significant underweight to the consumer staples sector and almost no investments in the materials and energy segments as we believe the companies in these sectors offer little long-term growth potential. Our strong fundamental research capabilities also helped us sidestep some underperforming companies in sectors we generally prefer. In IT, for example, we avoided IBM, which aided our relative returns as the stock recorded negative results for the year. The company is a component of the Russell index, but we viewed it as poorly positioned for the future of enterprise technology.

On the negative side, stock selection in financials was the largest detractor from the fund's relative results for the year. Despite solid absolute returns, discount broker **TD Ameritrade** faced uncertainty about how heightened compliance standards could impact its business, and the stock underperformed. We have a positive outlook on the company going forward, though, as we believe it could benefit from its acquisition of Scottrade and also receive a boost from tax reform. Holding California-based **First Republic Bank** also hampered returns in the sector as the bank's earnings were pressured by higher funding costs and expense growth. We eliminated our position.

## Sector Diversification

| | Percent of Net Assets | |
|---|---|---|
| | 6/30/17 | 12/31/17 |
| Information Technology | 38.1% | 41.0% |
| Consumer Discretionary | 22.6 | 20.7 |
| Health Care | 19.9 | 20.5 |
| Industrials and Business Services | 7.8 | 7.8 |
| Financials | 6.4 | 4.9 |
| Real Estate | 0.6 | 1.1 |
| Consumer Staples | 1.5 | 1.1 |
| Utilities | 0.0 | 1.1 |
| Telecommunication Services | 1.0 | 0.9 |
| Energy | 0.0 | 0.0 |
| Materials | 0.0 | 0.0 |
| Other and Reserves | 2.1 | 0.9 |
| Total | 100.0% | 100.0% |

Historical weightings reflect current industry/sector classifications.

Our top three sector allocations continue to be to information technology, consumer discretionary, and health care. These segments—which make up more than three-quarters of the portfolio's net assets—are areas where we can find innovative companies that offer above-average growth prospects. As shown in the Sector Diversification chart, our allocation to IT and health care increased over the past six months while we trimmed our consumer discretionary holdings. As far as notable new names in the portfolio, we added software company **VMware**, as we believe its software-as-a-service business model offers good relative risk/reward potential. We also initiated new positions in **Global Payments**, a payments solution provider that is well positioned for industry consolidation and the trend toward electronic payments, and global property and casualty insurance broker **Willis Towers Watson**. We believe the firm can benefit from rising prices in the wake of recent natural disasters.

## Outlook

We are certainly pleased with the strong rally in growth stocks we experienced in 2017, but with major indexes trading at record highs and earnings multiples in the top quartile of long-term averages, finding stocks that offer long-term growth opportunities at an attractive price has become more of a challenge. Investors should temper their expectations as we enter 2018, although we think there are tailwinds that could provide further support for the market in the months ahead.

Most notably, the stimulative effects of the tax reform package that was passed at the end of 2017 offer the potential to extend the current economic expansion, and the lower corporate tax rate could boost earnings. The impact of tax reform will likely vary widely by sector and at the company level. Some of these effects have already been priced into stocks, but the market is still trying to figure out some of the more esoteric elements of the new law. We believe this is an environment where fundamental research is a key to identifying companies that will outperform.

Tax reform could also contribute to a pickup in mergers and acquisitions, which could be positive for stocks. As a result of repatriation provisions in the new law, companies will have easier access to overseas earnings and it would not be surprising if many firms try to put this money to work in the form of acquisitions.

The economic and policy backdrop will undoubtedly be important this year, but, ultimately, we believe that the long-term success of our portfolio will come from a disciplined investment process that will enable us to identify high-quality companies with durable growth prospects that are poised to stand out from the broader market. This process allowed us to identify companies like Alibaba and Tencent and other names we discussed in the Portfolio Review section, and we look forward to adding holdings to the portfolio that are poised to benefit from innovation in areas such as e-commerce, cloud computing, artificial intelligence, and biotechnology.

We will continue to favor companies that have more control of their destiny, are positioned to benefit from powerful secular trends, and are using innovation to disrupt less efficient business models and create new ones. Finally, we believe that by consistently following a disciplined approach, we will be able to provide long-term investors with the potential for attractive returns.

Respectfully submitted,

Taymour Tamaddon
*Chairman of the fund's Investment Advisory Committee*

January 24, 2018

*The committee chairman has day-to-day responsibility for managing the portfolio and works with committee members in developing and executing the fund's investment program.*

## Risks of Stock Investing

As with all stock and bond mutual funds, a fund's share price can fall because of weakness in the stock or bond markets, a particular industry, or specific holdings. Stock markets can decline for many reasons, including adverse political or economic developments, changes in investor psychology, or heavy institutional selling. The prospects for an industry or company may deteriorate because of a variety of factors, including disappointing earnings or changes in the competitive environment. In addition, the investment manager's assessment of companies held in a fund may prove incorrect, resulting in losses or poor performance even in rising markets. Funds investing in stocks with a dividend orientation may have somewhat lower potential for price appreciation than those concentrating on rapidly growing firms. Also, a company may reduce or eliminate its dividend.

## Glossary

**Earnings growth rate – current fiscal year:** Measures the annualized percent change in earnings per share from the prior fiscal year to the current fiscal year.

**Gross domestic product:** The total market value of all goods and services produced in a country in a given year.

**Lipper indexes:** Fund benchmarks that consist of a small number (10 to 30) of the largest mutual funds in a particular category as tracked by Lipper Inc.

**Price-to-earnings (P/E) ratio – current fiscal year:** P/E is a valuation measure calculated by dividing the price of a stock by its reported earnings per share from the latest fiscal year. The ratio is a measure of how much investors are willing to pay for the company's earnings. The higher the P/E, the more investors are paying for the company's current earnings.

**Price-to-earnings (P/E) ratio – next fiscal year:** P/E is a valuation measure calculated by dividing the price of a stock by its estimated earnings for the next fiscal year. The ratio is a measure of how much investors are willing to pay for the company's future earnings. The higher the P/E, the more investors are paying for the company's expected earnings growth in the next fiscal year.

## Glossary (continued)

**Price-to-earnings (P/E) ratio – 12 months forward:** P/E is a valuation measure calculated by dividing the price of a stock by the analysts' forecast of the next 12 months' expected earnings. The ratio is a measure of how much investors are willing to pay for the company's future earnings. The higher the P/E, the more investors are paying for the company's earnings growth in the next 12 months.

**Projected earnings growth rate (IBES):** A company's expected earnings per share growth rate for a given time period based on the forecast from the Institutional Brokers' Estimate System, which is commonly referred to as IBES.

**Return on equity (ROE) – current fiscal year:** ROE is a valuation measure calculated by dividing the company's current fiscal year net income by shareholders' equity (i.e., the company's book value). ROE measures how much a company earns on each dollar that common stock investors have put into the company. It indicates how effectively and efficiently the company and its management are using stockholder investments.

**Russell 1000 Growth Index:** A market capitalization-weighted index of those firms in the Russell 1000 Index with higher price-to-book ratios and higher forecast growth values.

**Russell 1000 Index:** A market capitalization-weighted index that tracks the performance of the 1,000 largest U.S. companies.

**S&P 500 Index:** An unmanaged index that tracks the stocks of 500 primarily large-cap U.S. companies.

## Portfolio Highlights

### Twenty-Five Largest Holdings

| | Percent of Net Assets 12/31/17 |
|---|---|
| Amazon.com | 7.5% |
| Alphabet | 7.1 |
| Microsoft | 5.5 |
| Facebook | 4.6 |
| Priceline | 4.4 |
| Visa | 4.4 |
| Boeing | 4.3 |
| Apple | 3.7 |
| UnitedHealth Group | 2.9 |
| Cigna | 2.6 |
| Alibaba Group Holding | 2.5 |
| Intuitive Surgical | 2.3 |
| Becton, Dickinson & Company | 2.1 |
| Vertex Pharmaceuticals | 1.8 |
| Salesforce.com | 1.8 |
| PayPal Holdings | 1.8 |
| Dollar General | 1.8 |
| Morgan Stanley | 1.5 |
| Stryker | 1.5 |
| American Airlines | 1.4 |
| Intuit | 1.4 |
| Hilton Worldwide Holdings | 1.4 |
| Intercontinental Exchange | 1.3 |
| Anthem | 1.3 |
| Tencent Holdings | 1.3 |
| Total | 72.2% |

Note: The information shown does not reflect any exchange-traded funds (ETFs), cash reserves, or collateral for securities lending that may be held in the portfolio.

### Major Portfolio Changes

Listed in descending order of size.
Six Months Ended 12/31/17

| LARGEST PURCHASES |
|---|
| VMware* |
| Microsoft |
| Cigna |
| Global Payments* |
| Willis Towers Watson* |
| Restaurant Brands International |
| Crown Castle International |
| Alnylam Pharmaceuticals* |
| Workday |
| Becton, Dickinson & Company |

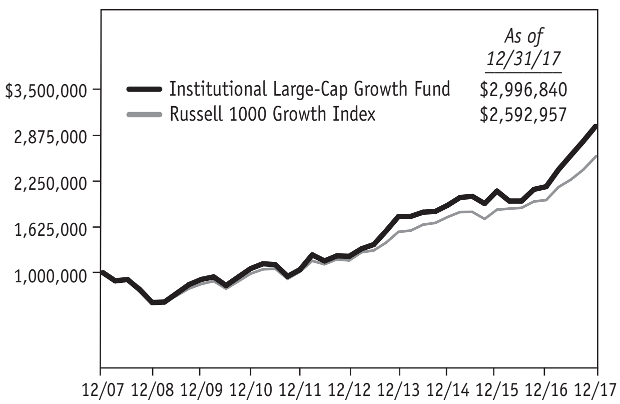
| LARGEST SALES |
|---|
| PayPal Holdings |
| NXP** |
| First Republic Bank** |
| Starbucks** |
| Home Depot |
| MGM Resorts International** |
| Morgan Stanley |
| Humana |
| Ferrari** |
| Celgene** |

*Position added.
**Position eliminated.

### Growth of $1 Million

This table shows the value of a hypothetical $1 million investment in the fund over the past 10 fiscal year periods or since inception (for funds lacking 10-year records). The result is compared with benchmarks, which may include a broad-based market index and a peer group average or index. Market indexes do not include expenses, which are deducted from fund returns as well as mutual fund averages and indexes.

### Institutional Large-Cap Growth Fund




### Average Annual Compound Total Return

| Periods Ended 12/31/17 | 1 Year | 5 Years | 10 Years |
|---|---|---|---|
| Institutional Large-Cap Growth Fund | 37.82% | 19.63% | 11.60% |

*Current performance may be higher or lower than the quoted past performance, which cannot guarantee future results. Share price, principal value, and return will vary, and you may have a gain or loss when you sell your shares. For the most recent month-end performance, please contact a T. Rowe Price representative at 1-800-638-8790.*

This table shows how the fund would have performed each year if its actual (or cumulative) returns for the periods shown had been earned at a constant rate. Average annual total return figures include changes in principal value, reinvested dividends, and capital gain distributions. Returns do not reflect taxes that the shareholder may pay on distributions or the redemption of shares. When assessing performance, investors should consider both short- and long-term returns.

### Expense Ratio

| | |
|---|---|
| Institutional Large-Cap Growth Fund | *0.56%* |

The expense ratio shown is as of the fund's fiscal year ended 12/31/16. This number may vary from the expense ratio shown elsewhere in this report because it is based on a different time period and, if applicable, includes acquired fund fees and expenses but does not include fee or expense waivers.

## Fund Expense Example

As a mutual fund shareholder, you may incur two types of costs: (1) transaction costs, such as redemption fees or sales loads, and (2) ongoing costs, including management fees, distribution and service (12b-1) fees, and other fund expenses. The following example is intended to help you understand your ongoing costs (in dollars) of investing in the fund and to compare these costs with the ongoing costs of investing in other mutual funds. The example is based on an investment of $1,000 invested at the beginning of the most recent six-month period and held for the entire period.

**Actual Expenses**
The first line of the following table (Actual) provides information about actual account values and actual expenses. You may use the information on this line, together with your account balance, to estimate the expenses that you paid over the period. Simply divide your account value by $1,000 (for example, an $8,600 account value divided by $1,000 = 8.6), then multiply the result by the number on the first line under the heading "Expenses Paid During Period" to estimate the expenses you paid on your account during this period.

**Hypothetical Example for Comparison Purposes**
The information on the second line of the table (Hypothetical) is based on hypothetical account values and expenses derived from the fund's actual expense ratio and an assumed 5% per year rate of return before expenses (not the fund's actual return). You may compare the ongoing costs of investing in the fund with other funds by contrasting this 5% hypothetical example and the 5% hypothetical examples that appear in the shareholder reports of the other funds. The hypothetical account values and expenses may not be used to estimate the actual ending account balance or expenses you paid for the period.

You should also be aware that the expenses shown in the table highlight only your ongoing costs and do not reflect any transaction costs, such as redemption fees or sales loads. Therefore, the second line of the table is useful in comparing ongoing costs only and will not help you determine the relative total costs of owning different funds. To the extent a fund charges transaction costs, however, the total cost of owning that fund is higher.

### Institutional Large-Cap Growth Fund

| | Beginning Account Value 7/1/17 | Ending Account Value 12/31/17 | Expenses Paid During Period* 7/1/17 to 12/31/17 |
|---|---|---|---|
| Actual | $1,000.00 | $1,152.10 | $3.04 |
| Hypothetical (assumes 5% return before expenses) | 1,000.00 | 1,022.38 | 2.85 |

*Expenses are equal to the fund's annualized expense ratio for the 6-month period (0.56%), multiplied by the average account value over the period, multiplied by the number of days in the most recent fiscal half year (184), and divided by the days in the year (365) to reflect the half-year period.

| | For a share outstanding throughout each period | | | | |
|---|---|---|---|---|---|
| | Year Ended 12/31/17 | 12/31/16 | 12/31/15 | 12/31/14 | 12/31/13 |
| **NET ASSET VALUE** | | | | | |
| Beginning of period | $ 29.24 | $ 28.89 | $ 27.48 | $ 27.26 | $ 18.88 |
| Investment activities | | | | | |
| Net investment income[1] | 0.08 | 0.07 | 0.02 | 0.02 | 0.02 |
| Net realized and unrealized gain / loss | 11.01 | 0.76 | 2.75 | 2.30 | 8.37 |
| Total from investment activities | 11.09 | 0.83 | 2.77 | 2.32 | 8.39 |
| Distributions | | | | | |
| Net investment income | (0.09) | (0.07) | (0.01) | (0.02) | (0.01) |
| Net realized gain | (3.33) | (0.41) | (1.35) | (2.08) | – |
| Total distributions | (3.42) | (0.48) | (1.36) | (2.10) | (0.01) |
| **NET ASSET VALUE** | | | | | |
| **End of period** | **$ 36.91** | **$ 29.24** | **$ 28.89** | **$ 27.48** | **$ 27.26** |

**Ratios/Supplemental Data**

| | | | | | |
|---|---|---|---|---|---|
| **Total return[2]** | **37.82%** | **2.85%** | **10.08%** | **8.72%** | **44.44%** |
| Ratio of total expenses to average net assets | 0.56% | 0.56% | 0.56% | 0.56% | 0.56% |
| Ratio of net investment income to average net assets | 0.24% | 0.24% | 0.06% | 0.06% | 0.07% |
| Portfolio turnover rate | 36.1% | 36.8% | 39.5% | 49.9% | 42.4% |
| Net assets, end of period (in millions) | $ 15,812 | $ 12,398 | $ 13,592 | $ 11,653 | $ 9,677 |

(1) Per share amounts calculated using average shares outstanding method.
(2) Total return reflects the rate that an investor would have earned on an investment in the fund during each period, assuming reinvestment of all distributions.

The accompanying notes are an integral part of these financial statements.

## Portfolio of Investments‡

T. Rowe Price Institutional Large-Cap Growth Fund
December 31, 2017

| (Cost and value in $000s) | Shares | $ Value |
|---|---|---|
| **COMMON STOCKS 98.1%** | | |
| **Consumer Discretionary 19.6%** | | |
| **Automobiles 0.8%** | | |
| Tesla (1) | 419,389 | 130,577 |
| | | 130,577 |
| **Hotels, Restaurants & Leisure 2.9%** | | |
| Hilton Worldwide Holdings | 2,758,101 | 220,262 |
| Restaurant Brands International | 1,957,500 | 120,347 |
| Yum! Brands | 1,460,800 | 119,216 |
| | | 459,825 |
| **Internet & Direct Marketing Retail 12.6%** | | |
| Amazon.com (1) | 1,014,729 | 1,186,695 |
| Flipkart Private Limited Acquisition Date: 3/19/15 Cost $2,263 (1)(2)(3) | 19,855 | 1,729 |
| Netflix (1) | 597,100 | 114,620 |
| Priceline (1) | 397,830 | 691,325 |
| | | 1,994,369 |
| **Multiline Retail 1.8%** | | |
| Dollar General | 2,979,600 | 277,132 |
| | | 277,132 |
| **Specialty Retail 1.5%** | | |
| Home Depot | 464,600 | 88,055 |
| Ross Stores | 1,883,100 | 151,119 |
| | | 239,174 |
| Total Consumer Discretionary | | **3,101,077** |
| **Consumer Staples 1.0%** | | |
| **Tobacco 1.0%** | | |
| Philip Morris International | 1,585,259 | 167,483 |
| Total Consumer Staples | | **167,483** |
| **Financials 4.9%** | | |
| **Capital Markets 4.2%** | | |
| Charles Schwab | 1,643,907 | 84,447 |

| (Cost and value in $000s) | Shares | $ Value |
|---|---|---|
| Intercontinental Exchange | 2,921,550 | 206,145 |
| Morgan Stanley | 4,516,753 | 236,994 |
| TD Ameritrade Holding | 2,536,593 | 129,696 |
| | | 657,282 |
| **Insurance 0.7%** | | |
| Willis Towers Watson | 752,780 | 113,437 |
| | | 113,437 |
| Total Financials | | **770,719** |
| **Health Care 20.5%** | | |
| **Biotechnology 4.9%** | | |
| Alexion Pharmaceuticals (1) | 1,186,881 | 141,939 |
| Alnylam Pharmaceuticals (1) | 931,481 | 118,345 |
| Biogen (1) | 506,562 | 161,376 |
| Incyte (1) | 734,970 | 69,609 |
| Vertex Pharmaceuticals (1) | 1,902,357 | 285,087 |
| | | 776,356 |
| **Health Care Equipment & Supplies 6.7%** | | |
| Becton, Dickinson & Company | 1,521,160 | 325,619 |
| Danaher | 1,527,010 | 141,737 |
| Intuitive Surgical (1) | 992,124 | 362,066 |
| Stryker | 1,503,383 | 232,784 |
| | | 1,062,206 |
| **Health Care Providers & Services 8.1%** | | |
| Aetna | 297,064 | 53,587 |
| Anthem | 892,150 | 200,743 |
| Centene (1) | 472,303 | 47,646 |
| Cigna | 2,010,512 | 408,315 |
| Humana | 413,335 | 102,536 |
| UnitedHealth Group | 2,111,900 | 465,589 |
| | | 1,278,416 |
| **Pharmaceuticals 0.8%** | | |
| Merck | 2,231,300 | 125,555 |
| | | 125,555 |
| Total Health Care | | **3,242,533** |

| (Cost and value in $000s) | Shares | $ Value |
|---|---|---|
| **Industrials & Business Services 7.8%** | | |
| **Aerospace & Defense 4.3%** | | |
| Boeing | 2,325,504 | 685,814 |
| | | 685,814 |
| **Airlines 2.0%** | | |
| Alaska Air Group | 1,226,934 | 90,192 |
| American Airlines | 4,363,719 | 227,044 |
| | | 317,236 |
| **Commercial Services & Supplies 1.0%** | | |
| Waste Connections | 2,119,350 | 150,347 |
| | | 150,347 |
| **Machinery 0.5%** | | |
| Fortive | 1,080,455 | 78,171 |
| | | 78,171 |
| Total Industrials & Business Services | | **1,231,568** |
| **Information Technology 40.8%** | | |
| **Internet Software & Services 15.8%** | | |
| Alibaba Group Holding, ADR (1) | 2,271,500 | 391,675 |
| Alphabet, Class A (1) | 682,322 | 718,758 |
| Alphabet, Class C (1) | 381,227 | 398,916 |
| Dropbox, Class A Acquisition Date: 11/7/14 Cost $4,515 (1)(2)(3) | 236,375 | 2,768 |
| Facebook, Class A (1) | 4,128,380 | 728,494 |
| Shopify, Class A (1) | 517,198 | 52,237 |
| Tencent Holdings, ADR | 3,852,100 | 200,001 |
| | | 2,492,849 |
| **IT Services 7.1%** | | |
| Global Payments | 1,452,284 | 145,577 |
| PayPal Holdings (1) | 3,778,800 | 278,195 |
| Visa, Class A | 6,057,800 | 690,710 |
| | | 1,114,482 |
| **Semiconductors & Semiconductor Equipment 1.1%** | | |
| ASML Holding | 378,800 | 65,843 |
| NVIDIA | 44,500 | 8,611 |

| (Cost and value in $000s) | Shares | $ Value |
|---|---|---|
| Xilinx | 1,535,322 | 103,511 |
| | | 177,965 |
| **Software 13.1%** | | |
| Electronic Arts (1) | 808,200 | 84,910 |
| Intuit | 1,437,567 | 226,819 |
| Microsoft | 10,197,500 | 872,294 |
| Red Hat (1) | 1,648,400 | 197,973 |
| Salesforce.com (1) | 2,738,200 | 279,926 |
| ServiceNow (1) | 1,176,885 | 153,454 |
| VMware, Class A (1) | 1,478,763 | 185,319 |
| Workday, Class A (1) | 766,200 | 77,953 |
| | | 2,078,648 |
| **Technology Hardware, Storage & Peripherals 3.7%** | | |
| Apple | 3,473,600 | 587,837 |
| | | 587,837 |
| Total Information Technology | | **6,451,781** |
| **Real Estate 1.2%** | | |
| **Equity Real Estate Investment Trusts 1.2%** | | |
| Crown Castle International, REIT | 1,666,400 | 184,987 |
| Total Real Estate | | **184,987** |
| **Telecommunication Services 0.9%** | | |
| **Wireless Telecommunication Services 0.9%** | | |
| T-Mobile US (1) | 2,242,607 | 142,428 |
| Total Telecommunication Services | | **142,428** |
| Total Miscellaneous Common Stocks 1.4% (4) | | **218,215** |
| **Total Common Stocks (Cost $8,552,399)** | | **15,510,791** |
| **PREFERRED STOCKS 0.1%** | | |
| **Consumer Discretionary 0.1%** | | |
| **Internet & Direct Marketing Retail 0.1%** | | |
| Flipkart, Series A Acquisition Date: 3/19/15 Cost $772 (1)(2)(3) | 6,777 | 590 |

| (Cost and value in $000s) | Shares | $ Value |
|---|---|---|
| Flipkart, Series C Acquisition Date: 3/19/15 Cost $1,364 (1)(2)(3) | 11,965 | 1,042 |
| Flipkart, Series E Acquisition Date: 3/19/15 Cost $2,536 (1)(2)(3) | 22,247 | 1,938 |
| Flipkart, Series G Acquisition Date: 12/17/14 Cost $12,091 (1)(2)(3) | 100,957 | 11,951 |
| Total Consumer Discretionary | | **15,521** |
| **Total Preferred Stocks (Cost $16,763)** | | **15,521** |
| **CONVERTIBLE PREFERRED STOCKS 0.9%** | | |
| **Consumer Discretionary 0.7%** | | |
| **Internet & Direct Marketing Retail 0.7%** | | |
| Airbnb, Series D Acquisition Date: 4/16/14 Cost $15,993 (1)(2)(3) | 392,823 | 45,980 |
| Airbnb, Series E Acquisition Date: 7/14/15 Cost $21,553 (1)(2)(3) | 231,515 | 27,099 |
| Uber Technologies Series E, Acquisition Date: 12/5/14 Cost $23,115 (1)(2)(3) | 693,764 | 23,919 |
| Uber Technologies Series G, Acquisition Date: 12/3/15 Cost $20,585 (1)(2)(3) | 422,055 | 14,551 |
| Total Consumer Discretionary | | **111,549** |
| **Information Technology 0.2%** | | |
| **Communications Equipment 0.1%** | | |
| Magic Leap, Series C Acquisition Date: 1/20/16 Cost $16,738 (1)(2)(3) | 726,712 | 19,621 |
| Magic Leap, Series D Acquisition Date: 10/12/17 Cost $5,850 (1)(2)(3) | 216,680 | 5,851 |
| | | 25,472 |
| **Internet Software & Services 0.1%** | | |
| Dropbox, Series C Acquisition Date: 1/30/14 Cost $15,000 (1)(2)(3) | 785,312 | 9,196 |
| | | 9,196 |
| Total Information Technology | | **34,668** |
| **Total Convertible Preferred Stocks (Cost $118,834)** | | **146,217** |
| **SHORT-TERM INVESTMENTS 0.9%** | | |
| **Money Market Funds 0.9%** | | |
| T. Rowe Price Government Reserve Fund, 1.24% (5)(6) | 141,811,988 | 141,812 |
| **Total Short-Term Investments (Cost $141,812)** | | **141,812** |

| | $ Value |
|---|---|
| (Cost and value in $000s) | |
| **Total Investments in Securities** | |
| 100.0% of Net Assets (Cost $8,829,808) | **$ 15,814,341** |

‡ Shares are denominated in U.S. dollars unless otherwise noted.
(1) Non-income producing
(2) Security cannot be offered for public resale without first being registered under the Securities Act of 1933 and related rules ("restricted security"). Acquisition date represents the day on which an enforceable right to acquire such security is obtained and is presented along with related cost in the security description. The fund has registration rights for certain restricted securities. Any costs related to such registration are borne by the issuer. The aggregate value of restricted securities (excluding 144A holdings) at period-end amounts to $166,235 and represents 1.1% of net assets.
(3) Level 3 in fair value hierarchy. See Note 2.
(4) The identity of certain securities has been concealed to protect the fund while it completes a purchase or selling program for the securities.
(5) Seven-day yield
(6) Affiliated Company
ADR American Depositary Receipts
REIT A domestic Real Estate Investment Trust whose distributions pass-through with original tax character to the shareholder

## Affiliated Companies

($000s)

The fund may invest in certain securities that are considered affiliated companies. As defined by the 1940 Act, an affiliated company is one in which the fund owns 5% or more of the outstanding voting securities, or a company that is under common ownership or control. The following securities were considered affiliated companies for all or some portion of the year ended December 31, 2017. Net realized gain (loss), investment income, change in net unrealized gain/loss, and purchase and sales cost reflect all activity for the period then ended.

| Affiliate | Net Realized Gain (Loss) | Change in Net Unrealized Gain/Loss | Investment Income |
|---|---|---|---|
| T. Rowe Price Government Reserve Fund | $ — | $ — | $ 2,015 |
| T. Rowe Price Short-Term Fund | — | — | —++ |
| Totals | $ —# | $ — | $ 2,015+ |

### Supplementary Investment Schedule

| Affiliate | Value 12/31/16 | Purchase Cost | Sales Cost | Value 12/31/17 |
|---|---|---|---|---|
| T. Rowe Price Government Reserve Fund | $ 206,798 | ¤ | ¤ | $ 141,812 |
| T. Rowe Price Short-Term Fund | — | ¤ | ¤ | — |
| | | | | $ 141,812^ |

\# Capital gain/loss distributions from mutual funds represented $0 of the net realized gain (loss).

++ Excludes earnings on securities lending collateral, which are subject to rebates and fees as described in Note 3.

\+ Investment income comprised $2,015 of dividend income and $0 of interest income.

¤ Purchase and sale information not shown for cash management funds.

^ The cost basis of investments in affiliated companies was $141,812.

The accompanying notes are an integral part of these financial statements.

## Statement of Assets and Liabilities

T. Rowe Price Institutional Large-Cap Growth Fund
December 31, 2017
($000s, except shares and per share amounts)

| | |
|---|---|
| **Assets** | |
| Investments in securities, at value (cost $8,829,808) | $ 15,814,341 |
| Receivable for shares sold | 28,894 |
| Receivable for investment securities sold | 14,268 |
| Dividends receivable | 5,194 |
| Other assets | 110 |
| Total assets | 15,862,807 |
| **Liabilities** | |
| Payable for shares redeemed | 35,398 |
| Payable for investment securities purchased | 7,504 |
| Investment management fees payable | 7,403 |
| Payable to directors | 11 |
| Due to affiliates | 9 |
| Other liabilities | 285 |
| Total liabilities | 50,610 |
| **NET ASSETS** | **$ 15,812,197** |
| **Net Assets Consist of:** | |
| Accumulated undistributed net realized loss | $ (21,290) |
| Net unrealized gain | 6,984,533 |
| Paid-in capital applicable to 428,402,692 shares of $0.0001 par value capital stock outstanding; 2,000,000,000 shares of the Corporation authorized | 8,848,954 |
| **NET ASSETS** | **$ 15,812,197** |
| **NET ASSET VALUE PER SHARE** | **$ 36.91** |

The accompanying notes are an integral part of these financial statements.

## Statement of Operations

T. Rowe Price Institutional Large-Cap Growth Fund
($000s)

| | Year Ended 12/31/17 |
|---|---|
| **Investment Income (Loss)** | |
| Income | |
| Dividend | $ 111,811 |
| Securities lending | 1,517 |
| Interest | 1 |
| Other | 1 |
| Total income | 113,330 |
| Expenses | |
| Investment management | 78,293 |
| Shareholder servicing | 24 |
| Prospectus and shareholder reports | 385 |
| Custody and accounting | 389 |
| Registration | 122 |
| Legal and audit | 34 |
| Directors | 43 |
| Miscellaneous | 135 |
| Total expenses | 79,425 |
| Net investment income | 33,905 |
| **Realized and Unrealized Gain / Loss** | |
| Net realized gain on securities | 1,548,442 |
| Change in net unrealized gain / loss | |
| Securities | 2,894,403 |
| When-Issued sales commitments | 122 |
| Change in net unrealized gain / loss | 2,894,525 |
| Net realized and unrealized gain / loss | 4,442,967 |
| **INCREASE IN NET ASSETS FROM OPERATIONS** | **$ 4,476,872** |

The accompanying notes are an integral part of these financial statements.

## Statement of Changes in Net Assets

T. Rowe Price Institutional Large-Cap Growth Fund
($000s)

| | Year Ended 12/31/17 | 12/31/16 |
|---|---|---|
| **Increase (Decrease) in Net Assets** | | |
| Operations | | |
| Net investment income | $ 33,905 | $ 30,770 |
| Net realized gain | 1,548,442 | 152,188 |
| Change in net unrealized gain / loss | 2,894,525 | 170,638 |
| Increase in net assets from operations | 4,476,872 | 353,596 |
| Distributions to shareholders | | |
| Net investment income | (35,558) | (29,756) |
| Net realized gain | (1,315,651) | (174,286) |
| Decrease in net assets from distributions | (1,351,209) | (204,042) |
| Capital share transactions* | | |
| Shares sold | 2,359,635 | 2,592,411 |
| Distributions reinvested | 1,280,709 | 192,992 |
| Shares redeemed | (3,352,150) | (4,128,551) |
| Increase (decrease) in net assets from capital share transactions | 288,194 | (1,343,148) |
| **Net Assets** | | |
| Increase (decrease) during period | 3,413,857 | (1,193,594) |
| Beginning of period | 12,398,340 | 13,591,934 |
| **End of period** | **$ 15,812,197** | **$ 12,398,340** |
| Undistributed net investment income | – | 1,584 |
| *Share information | | |
| Shares sold | 67,127 | 93,692 |
| Distributions reinvested | 34,391 | 6,521 |
| Shares redeemed | (97,068) | (146,784) |
| Increase (decrease) in shares outstanding | 4,450 | (46,571) |

The accompanying notes are an integral part of these financial statements.

T. Rowe Price Institutional Equity Funds, Inc. (the corporation) is registered under the Investment Company Act of 1940 (the 1940 Act). The Institutional Large-Cap Growth Fund (the fund) is a nondiversified, open-end management investment company established by the corporation. The fund seeks to provide long-term capital appreciation through investments in common stocks of growth companies.

### NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES

**Basis of Preparation** The fund is an investment company and follows accounting and reporting guidance in the Financial Accounting Standards Board (FASB) *Accounting Standards Codification* Topic 946 (ASC 946). The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States of America (GAAP), including, but not limited to, ASC 946. GAAP requires the use of estimates made by management. Management believes that estimates and valuations are appropriate; however, actual results may differ from those estimates, and the valuations reflected in the accompanying financial statements may differ from the value ultimately realized upon sale or maturity.

**Investment Transactions, Investment Income, and Distributions** Investment transactions are accounted for on the trade date basis. Income and expenses are recorded on the accrual basis. Realized gains and losses are reported on the identified cost basis. Dividends received from mutual fund investments are reflected as dividend income; capital gain distributions are reflected as realized gain/loss. Dividend income and capital gain distributions are recorded on the ex-dividend date. Income tax-related interest and penalties, if incurred, are recorded as income tax expense. Distributions from REITs are initially recorded as dividend income and, to the extent such represent a return of capital or capital gain for tax purposes, are reclassified when such information becomes available. Income distributions are declared and paid by the fund annually. Distributions to shareholders are recorded on the ex-dividend date. A capital gain distribution may also be declared and paid by the fund annually.

**Rebates** Subject to best execution, the fund may direct certain security trades to brokers who have agreed to rebate a portion of the related brokerage commission to the fund in cash. Commission rebates are reflected as realized gain on securities in the accompanying financial statements and totaled $59,000 for the year ended December 31, 2017.

**In-Kind Redemptions** In accordance with guidelines described in the fund's prospectus, and when considered to be in the best interest of all shareholders, the fund may distribute portfolio securities rather than cash as payment for a redemption of fund shares (in-kind redemption). Gains and losses realized on in-kind redemptions are not recognized for tax purposes and are reclassified from undistributed realized gain (loss) to paid-in capital. During the year ended December 31, 2017, the fund realized $130,299,000 of net gain on $234,217,000 of in-kind redemptions.

**New Accounting Guidance** In March 2017, the FASB issued amended guidance to shorten the amortization period for certain callable debt securities, held at a premium. The guidance is effective for fiscal years and interim periods beginning after December 15, 2018. Adoption will have no effect on the fund's net assets or results of operations.

On August 1, 2017, the fund implemented amendments to Regulation S-X, issued by the Securities and Exchange Commission, which require standardized, enhanced disclosures, particularly related to derivatives, in investment company financial statements. Adoption had no effect on the fund's net assets or results of operations.

**Indemnification** In the normal course of business, the fund may provide indemnification in connection with its officers and directors, service providers, and/or private company investments. The fund's maximum exposure under these arrangements is unknown; however, the risk of material loss is currently considered to be remote.

## NOTE 2 - VALUATION

The fund's financial instruments are valued and its net asset value (NAV) per share is computed at the close of the New York Stock Exchange (NYSE), normally 4 p.m. ET, each day the NYSE is open for business. However, the NAV per share may be calculated at a time other than the normal close of the NYSE if trading on the NYSE is restricted, if the NYSE closes earlier, or as may be permitted by the SEC.

**Fair Value** The fund's financial instruments are reported at fair value, which GAAP defines as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The T. Rowe Price Valuation Committee (the Valuation Committee) is an internal committee that has been delegated certain responsibilities by the fund's Board of Directors (the Board) to ensure that financial instruments are appropriately priced at fair value in accordance with GAAP and the 1940 Act. Subject to oversight by the Board, the Valuation Committee develops and oversees pricing-related policies and procedures and approves all fair value determinations. Specifically, the Valuation Committee establishes procedures to value securities; determines pricing techniques, sources, and persons eligible to effect fair value pricing actions; oversees the selection, services, and performance of pricing vendors; oversees valuation-related business continuity practices; and provides guidance on internal controls and valuation-related matters. The Valuation Committee reports to the Board and has representation from legal, portfolio management and trading, operations, risk management, and the fund's treasurer.

Various valuation techniques and inputs are used to determine the fair value of financial instruments. GAAP establishes the following fair value hierarchy that categorizes the inputs used to measure fair value:

Level 1 – quoted prices (unadjusted) in active markets for identical financial instruments that the fund can access at the reporting date

Level 2 – inputs other than Level 1 quoted prices that are observable, either directly or indirectly (including, but not limited to, quoted prices for similar financial instruments in active markets, quoted prices for identical or similar financial instruments in inactive markets, interest rates and yield curves, implied volatilities, and credit spreads)

Level 3 – unobservable inputs

Observable inputs are developed using market data, such as publicly available information about actual events or transactions, and reflect the assumptions that market participants would use to price the financial instrument. Unobservable inputs are those for which market data are not available and are developed using the best information available about the assumptions that market participants would use to price the financial instrument. GAAP requires valuation techniques to maximize the use of relevant observable inputs and minimize the use of unobservable inputs. When multiple inputs are used to derive fair value, the financial instrument is assigned to the level within the fair value hierarchy based on the lowest-level input that is significant to the fair value of the financial instrument. Input levels are not necessarily an indication of the risk or liquidity associated with financial instruments at that level but rather the degree of judgment used in determining those values.

**Valuation Techniques** Equity securities listed or regularly traded on a securities exchange or in the over-the-counter (OTC) market are valued at the last quoted sale price or, for certain markets, the official closing price at the time the valuations are made. OTC Bulletin Board securities are valued at the mean of the closing bid and asked prices. A security that is listed or traded on more than one exchange is valued at the quotation on the exchange determined to be the primary market for such security. Listed securities not traded on a particular day are valued at the mean of the closing bid and asked prices. Actively traded equity securities listed on a domestic exchange generally are categorized in Level 1 of the fair value hierarchy. OTC Bulletin Board securities, certain preferred securities, and equity securities traded in inactive markets generally are categorized in Level 2 of the fair value hierarchy.

Investments in mutual funds are valued at the mutual fund's closing NAV per share on the day of valuation and are categorized in Level 1 of the fair value hierarchy. Assets and liabilities other than financial instruments, including short-term receivables and payables, are carried at cost, or estimated realizable value, if less, which approximates fair value.

Thinly traded financial instruments and those for which the above valuation procedures are inappropriate or are deemed not to reflect fair value are stated at fair value as determined in good faith by the Valuation Committee. The objective of any fair value pricing determination is to arrive at a price that could reasonably be expected from a current sale. Financial instruments fair valued by the Valuation Committee are primarily private placements, restricted securities, warrants, rights, and other securities that are not publicly traded.

Subject to oversight by the Board, the Valuation Committee regularly makes good faith judgments to establish and adjust the fair valuations of certain securities as events occur and circumstances warrant. For instance, in determining the fair value of an equity investment with limited market activity, such as a private placement or a thinly traded public company stock, the Valuation Committee considers a variety of factors, which may include, but are not limited to, the issuer's business prospects, its financial standing and performance, recent investment transactions in the issuer, new rounds of financing, negotiated transactions of significant size between other investors in the company, relevant market valuations of peer companies, strategic events affecting the company, market liquidity for the issuer, and general economic conditions and events. In consultation with the investment and pricing teams, the Valuation Committee will determine an appropriate valuation technique based on available information, which may include both observable and unobservable inputs. The Valuation Committee typically will afford greatest weight to actual prices in arm's length transactions, to the extent they represent orderly transactions between market participants, transaction information can be reliably obtained, and prices are deemed representative of fair value. However, the Valuation Committee may also consider other valuation methods such as market-based valuation multiples; a discount or premium from market value of a similar, freely traded security of the same issuer; or some combination. Fair value determinations are reviewed on a regular basis and updated as information becomes available, including actual purchase and sale transactions of the issue. Because any fair value determination involves a significant amount of judgment, there is a degree of subjectivity inherent in such pricing decisions, and fair value prices determined by the Valuation Committee could differ from those of other market participants. Depending on the relative significance of unobservable inputs, including the valuation technique(s) used, fair valued securities may be categorized in Level 2 or 3 of the fair value hierarchy.

**Valuation Inputs** The following table summarizes the fund's financial instruments, based on the inputs used to determine their fair values on December 31, 2017:

| ($000s) | Level 1 | Level 2 | Level 3 | Total Value |
|---|---|---|---|---|
| | Quoted Prices | Significant Observable Inputs | Significant Unobservable Inputs | |
| Investments in Securities, except: | $ 141,812 | $ – | $ – | $ 141,812 |
| Common Stocks | 15,506,294 | – | 4,497 | 15,510,791 |
| Preferred Stocks | – | – | 15,521 | 15,521 |
| Convertible Preferred Stocks | – | – | 146,217 | 146,217 |
| Total | $ 15,648,106 | $ – | $ 166,235 | $ 15,814,341 |

There were no material transfers between Levels 1 and 2 during the year ended December 31, 2017.

Following is a reconciliation of the fund's Level 3 holdings for the year ended December 31, 2017. Gain (loss) reflects both realized and change in unrealized gain/loss on Level 3 holdings during the period, if any, and is included on the accompanying Statement of Operations. The change in unrealized gain/loss on Level 3 instruments held at December 31, 2017, totaled $(1,642,000) for the year ended December 31, 2017. Transfers into and out of Level 3 are reflected at the value of the financial instrument at the beginning of the period. During the year, transfers out of Level 3 were because observable market data became available for the security.

| ($000s) | Beginning Balance 1/1/17 | Gain (Loss) During Period | Total Purchases | Total Sales | Transfers Out of Level 3 | Ending Balance 12/31/17 |
|---|---|---|---|---|---|---|
| Investments in Securities | | | | | | |
| Common Stocks | $ 4,479 | $ 348 | $ – | $ (330) | $ – | $ 4,497 |
| Preferred Stocks | 15,797 | 2,683 | – | (2,959) | – | 15,521 |
| Convertible Preferred Stocks | 165,270 | (5,088) | 5,850 | – | (19,815) | 146,217 |
| Total Level 3 | $ 185,546 | $ (2,057) | $ 5,850 | $ (3,289) | $ (19,815) | $ 166,235 |

## NOTE 3 - OTHER INVESTMENT TRANSACTIONS

Consistent with its investment objective, the fund engages in the following practices to manage exposure to certain risks and/or to enhance performance. The investment objective, policies, program, and risk factors of the fund are described more fully in the fund's prospectus and Statement of Additional Information.

**Restricted Securities** The fund may invest in securities that are subject to legal or contractual restrictions on resale. Prompt sale of such securities at an acceptable price may be difficult and may involve substantial delays and additional costs.

**Securities Lending** The fund may lend its securities to approved borrowers to earn additional income. Its securities lending activities are administered by a lending agent in accordance with a securities lending agreement. Security loans generally do not have stated maturity dates, and the fund may recall a security at any time. The fund receives collateral in the form of cash or U.S. government securities, valued at 102% to 105% of the value of the securities on loan. Collateral is maintained over the life of the loan in an amount not less than the value of loaned securities; any additional collateral required due to changes in security values is delivered to the fund the next business day. Cash collateral is invested in accordance with investment guidelines approved by fund management. Additionally, the lending agent indemnifies the fund against losses resulting from borrower default. Although risk is mitigated by the collateral and indemnification, the fund could experience a delay in recovering its securities and a possible loss of income or value if the borrower fails to return the securities, collateral investments decline in value, and the lending agent fails to perform. Securities lending revenue consists of earnings on invested collateral and borrowing fees, net of any rebates to the borrower, compensation to the lending agent, and other administrative costs. In accordance with GAAP, investments made with cash collateral are reflected in the accompanying financial statements, but collateral received in the form of securities is not. At December 31, 2017, there were no securities on loan.

**When-Issued Securities** The fund may enter into when-issued purchase or sale commitments, pursuant to which it agrees to purchase or sell, respectively, an authorized but not yet issued security for a fixed unit price, with payment and delivery not due until issuance of the security on a scheduled future date. When-issued securities may be new securities or securities issued through a corporate action, such as a reorganization or restructuring. Until settlement, the fund maintains liquid assets sufficient to settle its commitment to purchase a when-issued security or, in the case of a sale commitment, the fund maintains an entitlement to the security to be sold. Amounts realized on when-issued transactions are included in realized gain/loss on securities in the accompanying financial statements.

**Other** Purchases and sales of portfolio securities other than short-term securities aggregated $4,702,684,000 and $5,788,247,000, respectively, for the year ended December 31, 2017.

## NOTE 4 - FEDERAL INCOME TAXES

No provision for federal income taxes is required since the fund intends to continue to qualify as a regulated investment company under Subchapter M of the Internal Revenue Code and distribute to shareholders all of its taxable income and gains. Distributions determined in accordance with federal income tax regulations may differ in amount or character from net investment income and realized gains for financial reporting purposes. Financial reporting records are adjusted for permanent book/tax differences to reflect tax character but are not adjusted for temporary differences.

The fund files U.S. federal, state, and local tax returns as required. The fund's tax returns are subject to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return but which can be extended to six years in certain circumstances. Tax returns for open years have incorporated no uncertain tax positions that require a provision for income taxes.

Reclassifications to paid-in capital relate primarily to redemptions in kind and a tax practice that treats a portion of the proceeds from each redemption of capital shares as a distribution of taxable net investment income or realized capital gain. Reclassifications between income and gain relate primarily to per-share rounding of distributions. For the year ended December 31, 2017, the following reclassifications were recorded to reflect tax character (there was no impact on results of operations or net assets):

| ($000s) | |
|---|---|
| Undistributed net investment income | $ 69 |
| Undistributed net realized gain | (283,831) |
| Paid-in capital | 283,762 |

Distributions during the years ended December 31, 2017 and December 31, 2016, were characterized for tax purposes as follows:

| ($000s) | December 31 | |
|---|---|---|
| | **2017** | **2016** |
| Ordinary income | $ 146,183 | $ 29,756 |
| Long-term capital gain | 1,205,026 | 174,286 |
| Total distributions | $ 1,351,209 | $ 204,042 |

At December 31, 2017, the tax-basis cost of investments, including derivatives, and components of net assets were as follows:

| ($000s) | |
|---|---|
| Cost of investments | $ 8,864,939 |
| Unrealized appreciation | $ 7,031,748 |
| Unrealized depreciation | (82,346) |
| Net unrealized appreciation (depreciation) | 6,949,402 |
| Undistributed ordinary income | 13,016 |
| Undistributed long-term capital gain | 825 |
| Paid-in capital | 8,848,954 |
| Net assets | $ 15,812,197 |

The difference between book-basis and tax-basis net unrealized appreciation (depreciation) is attributable to the deferral of losses from wash sales for tax purposes.

## NOTE 5 - RELATED PARTY TRANSACTIONS

The fund is managed by T. Rowe Price Associates, Inc. (Price Associates), a wholly owned subsidiary of T. Rowe Price Group, Inc. (Price Group). The investment management agreement between the fund and Price Associates provides for an annual investment management fee equal to 0.55% of the fund's average daily net assets. The fee is computed daily and paid monthly.

In addition, the fund has entered into service agreements with Price Associates and a wholly owned subsidiary of Price Associates (collectively, Price). Price Associates provides certain accounting and administrative services to the fund. T. Rowe Price Services, Inc. provides shareholder and administrative services in its capacity as the fund's transfer and dividend-disbursing agent. For the year ended December 31, 2017, expenses incurred pursuant to these service agreements were $86,000 for Price Associates and $20,000 for T. Rowe Price Services, Inc. The total amount payable at period-end pursuant to these service agreements is reflected as Due to Affiliates in the accompanying financial statements.

The fund may invest its cash reserves in certain open-end management investment companies managed by Price Associates and considered affiliates of the fund: the T. Rowe Price Government Reserve Fund or the T. Rowe Price Treasury Reserve Fund, organized as money market funds, or the T. Rowe Price Short-Term Fund, a short-term bond fund (collectively, the Price Reserve Funds). The Price Reserve Funds are offered as short-term investment options to mutual funds, trusts, and other accounts managed by Price Associates or its affiliates and are not available for direct purchase by members of the public. Cash collateral from securities lending is invested in the T. Rowe Price Short-Term Fund. The Price Reserve Funds pay no investment management fees.

The fund may participate in securities purchase and sale transactions with other funds or accounts advised by Price Associates (cross trades), in accordance with procedures adopted by the fund's Board and Securities and Exchange Commission rules, which require, among other things, that such purchase and sale cross trades be effected at the independent current market price of the security. During the year ended December 31, 2017, the aggregate value of purchases and sales cross trades with other funds or accounts advised by Price Associates was less than 1% of the fund's net assets as of December 31, 2017.

## Report of Independent Registered Public Accounting Firm

### To the Board of Directors of T. Rowe Price Institutional Equity Funds, Inc. and Shareholders of T. Rowe Price Institutional Large-Cap Growth Fund

***Opinion on the Financial Statements***

We have audited the accompanying statement of assets and liabilities, including the portfolio of investments, of T. Rowe Price Institutional Large-Cap Growth Fund (one of the funds constituting T. Rowe Price Institutional Equity Funds, Inc., hereafter referred to as the "Fund") as of December 31, 2017, the related statement of operations for the year ended December 31, 2017, the statement of changes in net assets for each of the two years in the period ended December 31, 2017, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2017 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2017, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2017 and the financial highlights for each of the five years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America.

***Basis for Opinion***

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2017 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP
Baltimore, Maryland
February 15, 2018

We have served as the auditor of one or more investment companies in the T. Rowe Price group of investment companies since 1973.

## Tax Information for the Tax Year (Unaudited) Ended 12/31/17

We are providing this information as required by the Internal Revenue Code. The amounts shown may differ from those elsewhere in this report because of differences between tax and financial reporting requirements.

The fund's distributions to shareholders included:

- $124,400,000 from short-term capital gains
- $1,345,463,000 from long-term capital gains, subject to a long-term capital gains tax rate of not greater than 20%.

For taxable non-corporate shareholders, $104,569,000 of the fund's income represents qualified dividend income subject to a long-term capital gains tax rate of not greater than 20%.

For corporate shareholders, $101,393,000 of the fund's income qualifies for the dividends-received deduction.

## Information on Proxy Voting Policies, Procedures, and Records

A description of the policies and procedures used by T. Rowe Price funds and portfolios to determine how to vote proxies relating to portfolio securities is available in each fund's Statement of Additional Information. You may request this document by calling 1-800-225-5132 or by accessing the SEC's website, sec.gov.

The description of our proxy voting policies and procedures is also available on our corporate website. To access it, please visit the following Web page:

https://www3.troweprice.com/usis/corporate/en/utility/policies.html

Scroll down to the section near the bottom of the page that says, "Proxy Voting Policies." Click on the Proxy Voting Policies link in the shaded box.

Each fund's most recent annual proxy voting record is available on our website and through the SEC's website. To access it through T. Rowe Price, visit the website location shown above, and scroll down to the section near the bottom of the page that says, "Proxy Voting Records." Click on the Proxy Voting Records link in the shaded box.

## How to Obtain Quarterly Portfolio Holdings

The fund files a complete schedule of portfolio holdings with the Securities and Exchange Commission for the first and third quarters of each fiscal year on Form N-Q. The fund's Form N-Q is available electronically on the SEC's website (sec.gov); hard copies may be reviewed and copied at the SEC's Public Reference Room, 100 F St. N.E., Washington, DC 20549. For more information on the Public Reference Room, call 1-800-SEC-0330.

## About the Fund's Directors and Officers

Your fund is overseen by a Board of Directors (Board) that meets regularly to review a wide variety of matters affecting or potentially affecting the fund, including performance, investment programs, compliance matters, advisory fees and expenses, service providers, and business and regulatory affairs. The Board elects the fund's officers, who are listed in the final table. At least 75% of the Board's members are independent of T. Rowe Price Associates, Inc. (T. Rowe Price), and its affiliates; "inside" or "interested" directors are employees or officers of T. Rowe Price. The business address of each director and officer is 100 East Pratt Street, Baltimore, Maryland 21202. The Statement of Additional Information includes additional information about the fund directors and is available without charge by calling a T. Rowe Price representative at 1-800-638-5660.

### Independent Directors

| Name (Year of Birth) Year Elected* [Number of T. Rowe Price Portfolios Overseen] | Principal Occupation(s) and Directorships of Public Companies and Other Investment Companies During the Past Five Years |
|---|---|
| Bruce W. Duncan (1951)<br>2013 [191] | Chief Executive Officer and Director (2009 to December 2016), Chairman of the Board (January 2016 to present), and President (2009 to September 2016), First Industrial Realty Trust, an owner and operator of industrial properties; Chairman of the Board (2005 to September 2016) and Director (1999 to September 2016), Starwood Hotels & Resorts, a hotel and leisure company; Director, Boston Properties (May 2016 to present); Director, Marriott International, Inc. (September 2016 to present) |
| Robert J. Gerrard, Jr. (1952)<br>2012 [191] | Advisory Board Member, Pipeline Crisis/Winning Strategies, a collaborative working to improve opportunities for young African Americans (1997 to present) |
| Paul F. McBride (1956)<br>2013 [191] | Advisory Board Member, Vizzia Technologies (2015 to present) |
| Cecilia E. Rouse, Ph.D. (1963)<br>2012 [191] | Dean, Woodrow Wilson School (2012 to present); Professor and Researcher, Princeton University (1992 to present); Member of National Academy of Education (2010 to present); Director, MDRC, a nonprofit education and social policy research organization (2011 to present); Research Associate of Labor Studies Program (2011 to 2015) and Board Member (2015 to present), National Bureau of Economic Research (2011 to present); Chair of Committee on the Status of Minority Groups in the Economic Profession (2012 to present); Vice President (2015 to present), American Economic Association |
| John G. Schreiber (1946)<br>2001 [191] | Owner/President, Centaur Capital Partners, Inc., a real estate investment company (1991 to present); Cofounder, Partner, and Cochairman of the Investment Committee, Blackstone Real Estate Advisors, L.P. (1992 to 2015); Director, General Growth Properties, Inc. (2010 to 2013); Director, Blackstone Mortgage Trust, a real estate finance company (2012 to 2016); Director and Chairman of the Board, Brixmor Property Group, Inc. (2013 to present); Director, Hilton Worldwide (2013 to present); Director, Hudson Pacific Properties (2014 to 2016) |
| Mark R. Tercek (1957)<br>2009 [191] | President and Chief Executive Officer, The Nature Conservancy (2008 to present) |

*Each independent director serves until retirement, resignation, or election of a successor.

## Inside Directors

| Name (Year of Birth) Year Elected* [Number of T. Rowe Price Portfolios Overseen] | Principal Occupation(s) and Directorships of Public Companies and Other Investment Companies During the Past Five Years |
|---|---|
| Edward C. Bernard (1956) 2006 [191] | Director and Vice President, T. Rowe Price; Vice Chairman of the Board, Director, and Vice President, T. Rowe Price Group, Inc.; Chairman of the Board, Director, and Vice President, T. Rowe Price Investment Services, Inc., and T. Rowe Price Services, Inc.; Chairman of the Board and Director, T. Rowe Price Retirement Plan Services, Inc.; Chairman of the Board, Chief Executive Officer, Director, and President, T. Rowe Price International and T. Rowe Price Trust Company; Chairman of the Board, all funds |
| Robert W. Sharps, CFA, CPA** (1971) 2017 [135] | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company; President, Institutional Equity Funds |

*Each inside director serves until retirement, resignation, or election of a successor.
**Effective April 1, 2017, Brian C. Rogers was replaced by Robert W. Sharps as an inside director of certain Price Funds.

## Officers

| Name (Year of Birth) Position Held With Institutional Equity Funds | Principal Occupation(s) |
|---|---|
| Francisco M. Alonso (1978) Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Brian W.H. Berghuis, CFA (1958) Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Darrell N. Braman (1963) Vice President and Secretary | Vice President, Price Hong Kong, Price Singapore, T. Rowe Price, T. Rowe Price Group, Inc., T. Rowe Price International, T. Rowe Price Investment Services, Inc., and T. Rowe Price Services, Inc. |
| Mark S. Finn, CFA, CPA (1963) Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| John R. Gilner (1961) Chief Compliance Officer | Chief Compliance Officer and Vice President, T. Rowe Price; Vice President, T. Rowe Price Group, Inc., and T. Rowe Price Investment Services, Inc. |
| Ann M. Holcomb, CFA (1972) Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Paul J. Krug, CPA (1964) Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| John D. Linehan, CFA (1965) Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Catherine D. Mathews (1963) Treasurer and Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Heather K. McPherson, CPA (1967) Executive Vice President | Vice President, T. Rowe Price and T. Rowe Price Group, Inc. |
| David Oestreicher (1967) Vice President | Director, Vice President, and Secretary, T. Rowe Price Investment Services, Inc., T. Rowe Price Retirement Plan Services, Inc., T. Rowe Price Services, Inc., and T. Rowe Price Trust Company; Chief Legal Officer, Vice President, and Secretary, T. Rowe Price Group, Inc.; Vice President and Secretary, T. Rowe Price and T. Rowe Price International; Vice President, Price Hong Kong and Price Singapore |
| Curt J. Organt, CFA (1968) Vice President | Vice President, T. Rowe Price and T. Rowe Price Group, Inc. |

Unless otherwise noted, officers have been employees of T. Rowe Price or T. Rowe Price International for at least 5 years.

## Officers (continued)

| Name (Year of Birth)<br>Position Held With Institutional Equity Funds | Principal Occupation(s) |
|---|---|
| Jason B. Polun, CFA (1974)<br>Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Larry J. Puglia, CFA, CPA (1960)<br>Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| John W. Ratzesberger (1975)<br>Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company; formerly, North American Head of Listed Derivatives Operation, Morgan Stanley (to 2013) |
| Shannon H. Rauser (1987)<br>Assistant Secretary | Employee, T. Rowe Price |
| Robert W. Sharps, CFA, CPA (1971)<br>Executive Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| Taymour R. Tamaddon, CFA (1976)<br>Executive Vice President | Vice President, T. Rowe Price and T. Rowe Price Group, Inc. |
| J. David Wagner, CFA (1974)<br>Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., and T. Rowe Price Trust Company |
| John F. Wakeman (1962)<br>Vice President | Vice President, T. Rowe Price and T. Rowe Price Group, Inc. |
| Megan Warren (1968)<br>Vice President | Vice President, T. Rowe Price, T. Rowe Price Group, Inc., T. Rowe Price Retirement Plan Services, Inc., T. Rowe Price Services, Inc., and T. Rowe Price Trust Company; formerly, Executive Director, JP Morgan Chase (to 2017) |
| Thomas H. Watson (1977)<br>Executive Vice President | Director and Vice President, T. Rowe Price Trust Company; Vice President, T. Rowe Price and T. Rowe Price Group, Inc. |

Unless otherwise noted, officers have been employees of T. Rowe Price or T. Rowe Price International for at least 5 years.

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T. Rowe Price Investment Services, Inc., Distributor.