## Table of Contents

## UNITED STATES

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

## ANNUAL REPORT PURSUANT TO SECTION 13 OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018
Commission file number 000-32191

## T. ROWE PRICE GROUP, INC.

(Exact name of registrant as specified in its charter)

## Maryland <br> State of incorporation <br> 52-2264646 <br> IRS Employer Identification No.

100 East Pratt Street, Baltimore, Maryland 21202
Address, including zip code, of principal executive offices
(410) 345-2000

Registrant's telephone number, including area code
Securities registered pursuant to Section 12(b) of the Act:

| Common stock, $\$ .20$ par value per share | The NASDAQ Stock Market LLC |
| :---: | :---: |
| (Title of class) | (Name of exchange on which registered) |

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. [X] Yes [ ] No Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. [ ] Yes [X] No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months, and (2) has been subject to such filing requirements for the past 90 days. [X] Yes [ ] No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulations S-T during the preceding 12 months. [X] Yes [ ] No
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer 凹 | Accelerated filer $\square$ |
| :--- | :--- |
| Non-accelerated filer $\square$ | (do not check if smaller reporting company) |
| Smaller reporting company $\square$ |  |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. $\square$
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). [ ] Yes [X] No
The aggregate market value of the common equity (all voting) held by non-affiliates (excludes executive officers and directors) computed using $\$ 116.09$ per share (the NASDAQ Official Closing Price on June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter) was $\$ 27.6$ billion.

The number of shares outstanding of the registrant's common stock as of the latest practicable date, February 12, 2019, is 236,263,621.
DOCUMENTS INCORPORATED BY REFERENCE: In Part III, the Definitive Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

Exhibit index begins on page 82
PAGE
PART I ..... 2
ITEM 1. Business ..... 2
ITEM 1A. Risk Factors ..... 11
ITEM 1B. Unresolved Staff Comments ..... 19
ITEM 2. Properties ..... 19
ITEM 3. Legal Proceedings ..... 20
ITEM 4. Mine Safety Disclosures ..... 20
ITEM. Executive Officers of the Registrant ..... 20
PART II ..... 22
ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities ..... 22
ITEM 6. Selected Financial Data ..... 23
ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations ..... 24
ITEM 7A. Quantitative and Qualitative Disclosures about Market Risk ..... 47
ITEM 8. Financial Statements and Supplementary Data ..... 49
ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure ..... 79
ITEM 9A. Controls and Procedures ..... 79
ITEM 9B. Other Information ..... 79
PART III ..... 82
ITEM 10. Directors, Executive Officers and Corporate Governance ..... 82
ITEM 11. Executive Compensation ..... 82
ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters ..... 82
ITEM 13. Certain Relationships and Related Transactions, and Director Independence ..... 82
ITEM 14. Principal Accountant Fees and Services ..... 82
PART IV ..... 82
ITEM 15. Exhibits, Financial Statement Schedules ..... 82
SIGNATURES ..... 86

## Table of Contents

## PART I

## Item 1. Business.

T. Rowe Price Group, Inc. is a financial services holding company that provides global investment management services through its subsidiaries to investors worldwide. We provide an array of U.S. mutual funds, separately managed accounts, subadvised funds, and other T. Rowe Price products. The other T. Rowe Price products include: collective investment trusts, target date retirement trusts, open-ended investment products offered to investors outside the U.S., and products offered through variable annuity life insurance plans in the U.S. We also provide certain investment advisory clients with related administrative services, including distribution, mutual fund transfer agent, accounting, and shareholder services; participant recordkeeping and transfer agent services for defined contribution retirement plans; brokerage; and trust services. We are focused on delivering global investment management excellence to help clients around the world achieve their long-term investment goals.

The late Thomas Rowe Price, Jr., founded our firm in 1937, and the common stock of T. Rowe Price Associates, Inc. was first offered to the public in 1986. The T. Rowe Price Group corporate holding company structure was established in 2000.

Our core capabilities have enabled us to deliver excellent operating results since our initial public offering in 1986. We maintain a client-centric culture that is focused on delivering strong long-term investment performance and world-class service to our clients. We have distributed our broad array of active investment strategies through a diverse set of distribution channels and vehicles to meet the needs of our global clients. Our ongoing financial strength has allowed us to take advantage of attractive growth opportunities and invest in key capabilities. These include adding to our client-facing associates and investment professionals across the globe, enhancing our technologies, introducing new product offerings, and, most importantly, providing our global clients with strong investment management expertise and service.

The market in which we operate has been evolving quickly and a number of headwinds have arisen over the last few years, including passive and alternative investments taking market share from traditional active strategies; a shifting demand from equities to income-oriented solutions as the population ages; pricing pressure; demand for new vehicles to meet client needs; an accelerating regulatory landscape; and a shifting demand from equities to income-oriented solutions as the population ages.

Despite the headwinds, we believe there are significant opportunities that align to our core capabilities. As such, we are responding with several multi-year initiatives that are designed to strengthen our long-term competitive position and to:

- Maintain our position as a premier active asset manager, delivering durable value to clients.
- Become an ever more integrated investment solutions provider, leveraging firmwide investment capabilities to meet changing client needs.
- Build T. Rowe Price into a more globally diversified asset manager.
- Become a more recognized global partner for retirement-oriented investors.
- Remain a destination of choice for top talent, with a culture of accountability and collaboration.
- Become a more agile company that stays ahead of and capitalizes on disruption.
- Deliver attractive financial results and balance sheet strength for our stockholders over the long term.


## Financial Overview / Assets Under Management

We derive the vast majority of our consolidated net revenue and net income from investment advisory services provided by our subsidiaries, primarily T. Rowe Price Associates and T. Rowe Price International Ltd. Our revenues depend largely on the total value and composition of assets under our management. Accordingly, fluctuations in financial markets and in the composition of assets under management impact our revenues and results of operations.

Page 2

## Table of Contents

At December 31, 2018, we had $\$ 962.3$ billion in assets under management, including $\$ 564.5$ billion in the U.S. mutual funds and $\$ 397.8$ billion in separately managed accounts, subadvised funds, and other T. Rowe Price products. While assets under management decreased $\$ 28.8$ billion from the end of 2017, we had net cash inflows of $\$ 13.2$ billion for 2018, but market depreciation and losses, including distributions not reinvested, lowered our assets under management by $\$ 42.0$ billion. In 2018, our net cash inflows included $\$ 12.0$ billion in our target date retirement products, which provide shareholders with a single, diversified portfolio that invests in underlying U.S. mutual funds or collective investment trusts. The assets under management in these products totaled $\$ 230.4$ billion at December 31, 2018, or $23.9 \%$ of our managed assets at December 31, 2018, compared with $23.6 \%$ at the end of 2017.

The following tables show our assets under management by distribution channel, vehicle, account type, and asset class:

| (in billions) | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets under management by distribution channel |  |  |  |  |
| Global financial intermediaries ${ }^{(1)}$ | \$ | 484.0 | \$ | 496.9 |
| Individual U.S. investors on a direct basis |  | 159.3 |  | 169.8 |
| U.S. retirement plan sponsors - full service recordkeeping |  | 107.6 |  | 111.2 |
| Global institutions ${ }^{(1)(2)}$ |  | 211.4 |  | 213.2 |
| Total assets under management | \$ | 962.3 | \$ | 991.1 |
|  |  |  |  |  |
| Assets under management by vehicle |  |  |  |  |
| U.S. mutual funds | \$ | 564.5 | \$ | 606.3 |
| Other investment products |  |  |  |  |
| T. Rowe Price collective investment trusts |  | 106.0 |  | 88.9 |
| T. Rowe Price stable value and variable annuity products |  | 20.0 |  | 19.2 |
| T. Rowe Price SICAVs and other funds regulated outside the U.S. |  | 21.8 |  | 21.5 |
| Subadvised and separately managed accounts |  | 250.0 |  | 255.2 |
| Total other investment products |  | 397.8 |  | 384.8 |
| Total assets under management | \$ | 962.3 | \$ | 991.1 |
|  |  |  |  |  |
| Assets under management by account type ${ }^{(3)}$ |  |  |  |  |
| Defined contribution - investment only | \$ | 401.8 | \$ | 403.3 |
| Defined contribution - full-service recordkeeping |  | 101.8 |  | 103.6 |
| Other retirement and deferred annuity assets |  | 149.9 |  | 163.6 |
| Total retirement and tax deferred annuity assets |  | 653.5 |  | 670.5 |
| Other |  | 308.8 |  | 320.6 |
| Total assets under management | \$ | 962.3 | \$ | 991.1 |
|  |  |  |  |  |
| Assets under management by asset class |  |  |  |  |
| Equity | \$ | 539.9 | \$ | 564.1 |
| Fixed income, including money market |  | 136.1 |  | 134.4 |
| Multi-Asset ${ }^{(4)}$ |  | 286.3 |  | 292.6 |
| Total assets under management | \$ | 962.3 | \$ | 991.1 |

${ }^{(1)}$ Includes Americas, EMEA, and APAC financial intermediaries and institutions.
${ }^{\text {(2) }}$ Includes T. Rowe Price investments in proprietary products, assets of the T. Rowe Price employee benefit plans, Private Asset Management accounts, and other.
${ }^{(3)}$ Certain 2017 amounts have been reclassified as additional information became available to enable more appropriate classification.
${ }^{(4)}$ The underlying assets under management of the multi-asset portfolios have been aggregated and presented in this category and not reported in the equity and fixed income rows.

Additional information concerning our assets under management, results of operations, and financial condition during the past three years is contained in the Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7, as well as our consolidated financial statements, which are included in Item 8 of this Form 10-K.

## INVESTMENT MANAGEMENT SERVICES.

## Distribution Channels and Products

We distribute our products in countries located within three broad geographical regions: Americas, Europe Middle East and Africa ("EMEA"), and Asia Pacific ("APAC"). We accumulate our assets under management from a diversified client base across five primary distribution channels: Americas financial intermediaries; EMEA and APAC financial intermediaries; individual U.S. investors on a direct basis; U.S. retirement plan sponsors for which we provide recordkeeping services; and institutional investors globally. Investors domiciled outside the U.S. represent about $6 \%$ of total assets under management at the end of 2018 . We service clients in 48 countries around the world. The following table outlines the types of products within each distribution channel through which our assets under management as of December 31, 2018, are sourced.

| Americas financial intermediaries | EMEA \& APAC financial intermediaries | Individual U.S. investors on a direct basis | U.S. retirement plan sponsors - full service recordkeeping | Global institutions |
| :---: | :---: | :---: | :---: | :---: |
| U.S. Mutual Funds | SICAVs ${ }^{(1)} / \mathrm{FCPs}^{(2)}$ | U.S. Mutual Funds | U.S. Mutual Funds | U.S. Mutual Funds |
| Collective Investment Trusts | Australian Unit Trusts ("AUTS") | Separate Accounts | Collective Investment Trusts | Collective Investment Trusts |
| Subadvised Accounts | OEICs ${ }^{(3)}$ | College Savings Plans | Separate Accounts | SICAVs ${ }^{(1)} / \mathrm{FCPs}^{(2)}$ |
| Managed Accounts / Model Delivery | Cayman Funds | Model Portfolio ${ }^{(4)}$ |  | Separate / Subadvised Accounts |
| College Savings Plans | Subadvised Accounts |  |  | Canadian Pooled Funds |
| ${ }^{(1)}$ Société d'Investissement à Capital Variable (Luxembourg), ${ }^{(2)}$ Fonds Commun de Placement (Luxembourg), ${ }^{(3)}$ Open ended investment company (U.K.), ${ }^{(4)}$ Provided through our ActivePlus Portfolios ${ }^{(5)}$ Japanese Investment Trust Management |  |  |  |  |
| Investment Capabilities |  |  |  |  |
| We manage a broad range of investment strategies in equity, fixed income, and multi-asset across sectors, styles and regions. Our strategies are designed to meet the varied and changing needs and objectives of investors and are delivered across a range of vehicles. We also offer specialized advisory services, including management of stable value investment contracts, modeled multi-asset solutions, and a distribution management service for the disposition of equity securities our clients receive from third-party venture capital investment pools. |  |  |  |  |

## Page 4

The following table sets forth our broad investment capabilities as of December 31, 2018.

| Equity |  | Fixed income |  | Multi-Asset |
| :---: | :---: | :---: | :---: | :---: |
| U.S. | International / Global | U.S. | International / Global | U.S. / International / Global |
| Large-Cap: Growth, Core, Value | Global: All-Cap, Growth, Value | Core Bond | Global Aggregate | Target Date/Custom Target Date |
| Mid-Cap: Growth, Core, Value | International Developed: Growth, Core, Value | Credit Opportunities | Global Multi-Sector | Target Allocation |
| Small-Cap: Growth, Core, Value | International Small-Cap | Corporate | Global Dynamic Bond | Global Allocation |
| Quantitative Equity: Multi-Cap, Style Index | Emerging Markets Global: Growth, Value | Bank Loan | Global High Income | Managed Volatility |
| Tax Efficient | Europe: Growth | High Yield | Emerging Markets | Multi-Asset Solutions |
| Sectors | Japan: Growth | Stable Value | International Developed | Real Assets |
|  | Australia: Growth | Securitized | Global Corporate | Retirement Income |
|  | Frontier Markets | Treasury | Global High Yield | Alternatives |
|  | Quantitative Equity: Global | Short Duration | Global Government |  |
|  | Sectors | Municipal | Asia |  |
|  |  | uantitative Fixed: Sty Index |  |  |

We employ fundamental and quantitative security analysis in the performance of the investment advisory function through substantial internal equity and fixed income investment research capabilities. We perform original industry and company research using such sources as inspection of corporate activities, management interviews, company-published financial and other information, and field checks with suppliers and competitors in the same industry and particular business sector. Our dedicated, in-house research analysts consider tangible investment factors such as financial information, valuation, and macroeconomics in tandem with intangible environmental, social, and corporate governance investment factors.

Our research staff operates primarily from offices located in the U.S. and U.K. with additional staff based in Australia, Hong Kong, Japan, Singapore, and Switzerland. We also use research provided by brokerage firms and security analysts in a supportive capacity and information received from private economists, political observers, commentators, government experts, and market analysts. Our securities selection process for some investment portfolios is based on quantitative analysis using computerized data modeling.

From time to time, we introduce new strategies, investment vehicles, and other products to complement and expand our investment offerings, respond to competitive developments in the financial marketplace, and meet the changing needs of our investment advisory clients. We will introduce a new investment strategy if we believe that we have the appropriate investment management expertise and that its objective will be useful to investors over a long period. In 2018, we introduced four new strategies and several new vehicles and share classes of existing strategies.

We typically provide seed capital for new investment products to enable the portfolio manager to begin building an investment performance history in advance of the portfolio receiving sustainable client assets. The length of time we hold our seed capital investment will vary for each new investment product as it is highly dependent on how long it takes to generate cash flows into the product from unrelated investors. We attempt to ensure that the new investment product has a sustainable level of assets from unrelated shareholders before we consider redemption of our seed capital investment in order to not negatively impact the new investment product's net asset value or its investment performance record. At December 31, 2018, we had seed capital investments of $\$ 1.1$ billion in our products.

Page 5

## Table of Contents

Conversely, we may also close or limit new investments across all T. Rowe Price investment products in order to maintain the integrity of the investment strategy and to protect the interests of its existing shareholders and investors. At present, the following strategies, which represent about $20 \%$ of total assets under management at December 31, 2018, are generally closed to new investors:

| Strategy | Year closed |
| :--- | ---: |
| U.S. Mid-Cap Growth | 2010 |
| U.S. Mid-Cap Value | 2010 |
| High Yield Bond | 2012 |
| U.S. Small-Cap Growth | 2013 |
| U.S. Small-Cap Core | 2013 |
| Capital Appreciation | 2014 |
| Global Technology | 2017 |
| Emerging Markets Growth | 2018 |
| International Small-Cap Growth | 2018 |

## Investment Advisory Fees

We provide investment advisory services through our subsidiaries to the U.S. mutual funds; clients on a separately managed or subadvised account basis; and other T. Rowe Price products, including collective investment trusts, target date retirement trusts, funds offered to investors outside the U.S., and portfolios offered through variable annuity life insurance plans in the U.S.

Ten of our 179 U.S. mutual funds - Growth Stock, Blue Chip Growth, Mid-Cap Growth, Capital Appreciation, Value, New Horizons, New Income, Equity Income, Overseas Stock, and Emerging Markets Stock - accounted for approximately 35\% of our investment advisory revenues in 2018, and approximately $28 \%$ of our assets under management at December 31, 2018. Our largest client account relationship, apart from the U.S. mutual funds, is with a third-party financial intermediary that accounted for about $6 \%$ of our investment advisory revenues in 2018.

## U.S. Mutual Funds

At December 31, 2018, assets under our management in the U.S. mutual funds aggregated $\$ 564.5$ billion, a decrease of $6.9 \%$ or $\$ 41.8$ billion from the beginning of the year. Investment advisory services are provided to each U.S. mutual fund under individual investment management agreements that grant the fund the right to use the T. Rowe Price name. The Boards of the respective funds, including a majority of directors who are not interested persons of the funds or of T. Rowe Price Group (as defined in the Investment Company Act of 1940), must approve the investment management agreements annually. Fund shareholders approve material changes to these investment management agreements. Each agreement automatically terminates in the event of its assignment (as defined in the Investment Company Act) and, generally, either party may terminate the agreement without penalty after a 60-day notice. The termination of one or more of these agreements could have a material adverse effect on our results of operations. Independent directors and trustees of the U.S. mutual funds regularly review our fee structures.

The advisory fee paid monthly by each of the U.S. mutual funds is computed on a daily basis by multiplying a fund's net assets by its effective fee rate. For the majority of the U.S. mutual funds, the fee rate is equal to the sum of a tiered group fee rate plus an individual fund rate. The tiered group rate is based on the combined net assets of nearly all of the U.S. mutual funds. If the combined net assets of these U.S. mutual funds exceed $\$ 650$ billion, the weighted-average fee across pricing tiers is 28.6 basis points for the first $\$ 650$ billion of net assets plus 26.5 basis points for net assets in excess of $\$ 650$ billion. To the extent that the combined net assets of the funds included in the group rate calculation increase, the group charge component of a fund's advisory fee rate and the resulting advisory fee rate paid by each fund will decrease.

The individual fund rates are generally flat rates that are set based on the fund's specific investment objective. Several funds including; the Blue Chip Growth, Equity Income, Growth Stock, and Mid-Cap Growth funds, have an effective tiered individual fund rate in which their base individual flat rate is reduced by about $15 \%$ on net assets in excess of $\$ 15$ billion. The New Income and Value funds have their base individual flat rate reduced by about 15\%

## Table of Contents

on net assets in excess of $\$ 20$ billion. The Capital Appreciation Fund has its base individual flat rate reduced by 10\% on net assets in excess of $\$ 27.5$ billion. The effective fee rates for each of the stock and bond funds on which we earned annual advisory fees of approximately $\$ 6.0$ million or greater in 2018, varied from a low of 15 basis points for the U.S Treasury Long-Term fund to a high of 104 basis points for the Emerging Markets Stock and International Discovery funds.

The fee rate of several of the U.S. mutual funds, including the Index and Summit funds as well as specific funds offered solely to institutional investors, does not include a group fee component but rather an individual fund fee or an all-inclusive fee. An all-inclusive fee covers both the investment management fee and ordinary operating expenses incurred by the fund and, as a result, our management fee varies with the level of operating expenses a fund incurs. Each of the funds in the Spectrum Funds series and in the multiple target date retirement funds series that we offer invests in a diversified portfolio of other U.S. mutual funds and has no separate investment advisory fee; rather, they indirectly bear the expenses of the funds in which they invest.

Each U.S. mutual fund typically bears all expenses associated with its operation and the issuance and redemption of its securities. In particular, each fund pays investment advisory fees; shareholder servicing fees and expenses; fund accounting fees and expenses; transfer and sub-transfer agent fees; custodian fees and expenses; legal and auditing fees; expenses of preparing, printing and mailing prospectuses and shareholder reports to existing shareholders; registration fees and expenses; proxy and annual meeting expenses; and independent trustee or director fees and expenses.

We usually provide that a newly organized fund's expenses will not exceed a specified percentage of its net assets during an initial operating period. Generally, during the earlier portion of the period, we will waive advisory fees and absorb other fund expenses, such as those described above, in excess of these self-imposed limits. During the latter portion of the period, we may recover some or all of the waived fees and absorbed costs, but such recovery is not assured. Beginning in 2017, we implemented new contractual management fee waivers for certain U.S mutual funds, including nearly all money market funds, which unlike traditional expense limits for newly organized funds, these waivers will not be recovered by T . Rowe Price in the future.

## Subadvised and separate accounts and other investment products

Our subadvised and separate accounts and other investment products had assets under management of $\$ 397.8$ billion at December 31, 2018, an increase of $\$ 13.0$ billion from the beginning of the year. We charge fees for investment management to these clients based on, among other things, the specific investment services to be provided. Our standard form of investment advisory agreement with other T. Rowe Price products that pay management fees on a daily basis normally provides for termination with thirty days notice. Our standard separately managed account agreements provide for termination at any time and the refunding of any unearned fees paid in advance. Our standard subadvised client account agreement typically provides for termination with sixty days notice.

Our subsidiaries, T. Rowe Price (Luxembourg) Management Sàrl and T. Rowe Price Australia, provide management company and investment management services, respectively, to our Luxembourg-based SICAVs and FCPs, and AUTs. T. Rowe Price (Luxembourg) Management Sàrl and T. Rowe Price International, provide authorized corporate depositor and investment management services, respectively, to our UK-based OEICs. T. Rowe Price (Canada) provides investment management services to our Canadian Pooled Funds. T. Rowe Price Japan, provides investment management services to our Japan Investment Trust. Our subsidiaries, T. Rowe Price Associates and T. Rowe Price Hong Kong may also provide subadvised investment management services to these global investment products. We distribute several of these products outside the U.S. through distribution agents and other financial intermediaries. The fees we earn for distributing and marketing these products are part of our overall investment management fees for managing the product assets. We currently recognize any related distribution fees paid to these financial intermediaries in distribution and servicing costs.

In addition to providing investment management services to the U.S. mutual funds, our subsidiaries, T. Rowe Price Associates and T. Rowe Price International, offer separately managed institutional investment management and subadvised investment management services to global intermediaries. Our subsidiary, T. Rowe Price Trust Company, offers and provides investment management services to our T. Rowe Price collective investment trusts, which are used in the investment portfolios of certain qualified U.S. retirement plans.

## Table of Contents

Our fees for managing these subadvised and separate accounts and other investment products are computed using the value of assets under our management at a contracted annual fee rate. The value of assets under management billed is generally based on daily valuations, end of billing period valuations, or month-end average valuations. In 2018, approximately $78 \%$ of our advisory fees were recognized based on daily portfolio valuations, $14 \%$ were based on end of billing period valuations, and $8 \%$ were based on month-end averages.

## ADMINISTRATIVE, DISTRIBUTION, AND SERVICING FEES.

## Administrative Services

We also provide certain administrative services as ancillary services to our investment advisory clients. These administrative services are provided by several of our subsidiaries and include mutual fund transfer agent, accounting, distribution, and shareholder services; participant recordkeeping and transfer agent services for defined contribution retirement plans investing in U.S. mutual funds; recordkeeping services for defined contribution retirement plans investing in mutual funds outside the T. Rowe Price complex; brokerage; and trust services.
T. Rowe Price Services provides the U.S. mutual funds transfer agency and shareholder services, including the staff, facilities, technology, and other equipment to respond to inquiries from fund shareholders. The U.S. mutual funds contract directly with BNY Mellon to provide mutual fund accounting services, including maintenance of financial records, preparation of financial statements and reports, daily valuation of portfolio securities, and computation of each mutual fund's daily net asset values per share.
T. Rowe Price Retirement Plan Services provides participant accounting and plan administration for defined contribution retirement plans that invest in the U.S. mutual funds, the T. Rowe Price collective investment trusts, and funds outside the T. Rowe Price complex. T. Rowe Price Retirement Plan Services also provides transfer agent services to the U.S. mutual funds. Plan sponsors and participants compensate us for some of the administrative services while the U.S. mutual funds and outside fund families compensate us for maintaining and administering the individual participant accounts for those plans that invest in the respective funds. As of December 31, 2018, we provided recordkeeping services for $\$ 171$ billion in assets under administration, of which $\$ 108$ billion are assets we manage.
T. Rowe Price Trust Company provides administrative trustee services. Through this entity, which is a Maryland-chartered limited service trust company, we serve as trustee for employer sponsored retirement plans and other retirement products. T. Rowe Price Trust Company may not accept deposits and cannot make personal or commercial loans.

We also provide non-discretionary advisory planning services to fund shareholders and potential investors through our subsidiary T. Rowe Price Advisory Services. These services are limited in scope and include retirement planning services, such as saving for retirement, transitioning into retirement, and income in retirement. An investment portfolio evaluation service is an integral part of these services. An ongoing checkup service is also available to assist investors in staying on track to achieve their financial goals.

## Distribution and Servicing

The Investor Class of all U.S. mutual funds can be purchased in the U.S. on a no-load basis, without a sales commission or 12b-1 fee. No-load mutual fund shares offer investors a low-cost and relatively easy method of directly investing in a variety of equity, fixed income, and multi-asset products. The I Class of certain U.S. mutual funds is designed to meet the needs of institutionally oriented clients who seek investment products with lower shareholder servicing costs and lower expense ratios. This share class limits ordinary operating expenses (other than interest; expenses related to borrowings, taxes, and brokerage; and any non-extraordinary expenses) at 5 basis points for a period of time and there are no external payments for $12 \mathrm{~b}-1$ or administrative fee payments.

Certain of the U.S. mutual funds also offer Advisor Class and R Class shares that are distributed to investors and defined contribution retirement plans, respectively. These share classes pay $12 \mathrm{~b}-1$ fees of 25 and 50 basis points, respectively, for distribution, administration, and personal services. Our subsidiary, T. Rowe Price Investment Services ("TRPIS"), is the principal distributor of the U.S. mutual funds and contracts with third-party financial intermediaries who distribute these share classes. TRPIS enters into agreements with each intermediary under which each fund is responsible to pay the distribution and service fees directly to the applicable intermediaries. In addition, those U.S. mutual funds offered to investors through variable annuity life insurance plans have a share class that pays a $12 \mathrm{~b}-1$ fee of 25 basis points.

## Table of Contents

In accounting for 12b-1 fees, the applicable mutual fund share classes incur the related expense and we recognize the corresponding distribution and servicing fee revenue in the administrative, distribution, and servicing fees line of our consolidated statements of income. We also recognize the corresponding cost paid to the third-party financial intermediaries who distribute these funds' share classes within the distribution and servicing costs line of the consolidated statements of income, The fee revenue that we recognize from the funds and the expense that we recognize for the fees paid to third-party intermediaries are equal in amount and, therefore, do not impact our net operating income.

We believe that our lower fund cost structure, distribution methods, and fund shareholder and administrative services help promote the stability of our fund assets under management through market cycles.

Except as noted above for 12b-1 fees earned from the mutual funds, we bear all advertising and promotion expenses associated with the distribution of our investment products. These costs are recognized when incurred and include advertising and direct mail communications to potential shareholders, as well as substantial staff and communications capabilities to respond to investor inquiries. Marketing and promotional efforts are focused in print media, television, and digital and social media. In addition, we direct considerable marketing efforts to defined contribution plans that invest in mutual funds. Advertising and promotion expenditures vary over time based on investor interest, market conditions, new and existing investment offerings, and the development and expansion of new marketing initiatives, including the enhancement of our digital capabilities.

## REGULATION.

All aspects of our business are subject to extensive federal, state, and foreign laws and regulations. These laws and regulations are primarily intended to benefit or protect our clients and T. Rowe Price product shareholders. They generally grant supervisory agencies and bodies broad administrative powers, including the power to limit or restrict the conduct of our business in the event that we fail to comply with laws and regulations. Possible sanctions that may be imposed on us, in the event that we fail to comply, include the suspension of individual employees, limitations on engaging in certain business activities for specified periods of time, revocation of our investment adviser and other registrations, censures, and fines.
T. Rowe Price Associates, T. Rowe Price International, T. Rowe Price (Canada), Inc., T. Rowe Price Hong Kong Limited, T. Rowe Price Singapore Private Ltd., and T. Rowe Price Advisory Services, Inc. are registered with the Securities and Exchange Commission ("SEC") as investment advisers under the Investment Advisers Act of 1940. The Investment Advisers Act of 1940 imposes substantive regulation around, among other things, fiduciary duties to clients, transactions with clients, effective compliance programs, conflicts of interest, advertising, recordkeeping, reporting, and disclosure requirements.
T. Rowe Price International is also regulated by the Financial Conduct Authority ("FCA") in the United Kingdom and, in certain cases, by other foreign regulators in countries in which we have a license to conduct business. The Securities and Futures Commission ("SFC") and Monetary Authority of Singapore ("MAS") also regulate T. Rowe Price Hong Kong and T. Rowe Price Singapore, respectively. T. Rowe Price (Canada) is also registered with several of the provincial securities commissions in Canada. T. Rowe Price (Luxembourg) Management Sàrl, the management company of our Luxembourg-based FCP ("Fonds Commun de Placement") and SICAV funds is regulated by the Commission de Surveillance du Secteur Financier ("CSSF"). Our branch offices operated outside the U.S. are also registered with and regulated by the local financial authorities.

Our subsidiaries providing transfer agent services are registered under the Securities Exchange Act of 1934, and our trust company is regulated by the State of Maryland, Commissioner of Financial Regulation.
T. Rowe Price Investment Services is a registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") and the Securities Investor Protection Corporation. This subsidiary provides brokerage services primarily to complement the other services provided to shareholders of the U.S. mutual funds. Pershing, a third-party clearing broker and an affiliate of BNY Mellon, maintains our brokerage's customer accounts and clears all transactions.

Serving the needs of retirement savers is an important focus of our business. As a result, such activities are subject to regulators such as the U.S. Department of Labor, and applicable laws and regulations including the Employee Retirement Income Security Act of 1974.

## Table of Contents

Certain of our subsidiaries are subject to net capital requirements, including those of various federal, state, and international regulatory agencies. Each of our subsidiary's net capital, as defined, meets or exceeds all minimum requirements.

For further discussion of the potential impact of current or proposed legal or regulatory requirements, please see the Legal and Regulatory risk factors included in Item 1A of this Form 10-K.

## COMPETITION.

As a member of the financial services industry, we are subject to substantial competition in all aspects of our business. A significant number of proprietary and other sponsors' mutual funds are sold to the public by other investment management firms, broker-dealers, mutual fund companies, banks, and insurance companies. We compete with brokerage and investment banking firms, insurance companies, banks, mutual fund companies, hedge funds, and other financial institutions and funds in all aspects of our business and in every country in which we offer our advisory services. Many of these financial institutions have substantially greater resources than we do. We compete with other providers of investment advisory services primarily based on the availability and objectives of the investment products offered, investment performance, fees and related expenses, and the scope and quality of investment advice and other client services.

In recent years, we have faced significant competition from passive oriented investment strategies. As a result, such products have taken market share from active managers. While we cannot predict how much market share these competitors will gain, we believe there will always be demand for good active management.

In order to maintain and enhance our competitive position, we may review acquisition and venture opportunities and, if appropriate, engage in discussions and negotiations that could lead to the acquisition of a new equity or other financial relationship.

## EMPLOYEES.

At December 31, 2018, we employed 7,022 associates, up $2.0 \%$ from the 6,881 associates employed at the end of 2017. We may add temporary and part-time personnel to our staff from time to time to meet periodic and special project demands, primarily for technology and mutual fund administrative services.

## AVAILABLE INFORMATION.

Our Internet address is troweprice.com. We intend to use our website as means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. These disclosures will be included in the Investor Relations section of our website, troweprice.gcs-web.com. We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act, available free of charge in this section of our website as soon as reasonably practicable after they have been filed with the SEC. In addition, our website includes the following information:

- our financial statement information from our periodic SEC filings in the form of XBRL data files that may be used to facilitate computerassisted investor analysis;
- corporate governance information including our governance guidelines, committee charters, senior officer code of ethics and conduct, and other governance-related policies;
- other news and announcements that we may post from time to time that investors might find useful or interesting, including our monthly assets under management disclosure; and
- opportunities to sign up for email alerts and RSS feeds to have information pushed in real time.

Accordingly, investors should monitor this section of our website, in addition to following our press releases, SEC filings, and public webcasts, all of which will be referenced on the website. Unless otherwise expressly stated, the information found on our website is not part of this or any other report we file with, or furnish to, the SEC.

## Table of Contents

The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information of the Public Reference Room by calling the SEC at $1-800-$ SEC-0330. The SEC maintains a website that contains the materials we file with the SEC at www.sec.gov.

## Item 1A. Risk Factors.

An investment in our common stock involves various risks, including those mentioned below and those that are discussed from time to time in our periodic filings with the SEC. Investors should carefully consider these risks, along with the other information contained in this report, before making an investment decision regarding our common stock. There may be additional risks of which we are currently unaware, or which we currently consider immaterial. Any of these risks could have a material adverse effect on our financial condition, results of operations, and value of our common stock.

## RISKS RELATING TO OUR BUSINESS AND THE FINANCIAL SERVICES INDUSTRY.

## Our revenues are based on the market value and composition of the assets under our management, all of which are subject to fluctuation caused by factors outside of our control.

We derive our revenues primarily from investment advisory services provided by our subsidiaries to individual and institutional investors in the U.S. mutual funds and other investment products. Our investment advisory fees typically are calculated as a percentage of the market value of the assets under our management. We generally earn higher fees on assets invested in our equity funds and equity investment portfolios than we earn on assets invested in our fixed income funds and portfolios. Among equity products, there is a significant variation in fees earned from indexbased products at the low end and emerging markets products at the high end. Fees also vary across the fixed income products, though not as widely as equity products, with stable value products and money market products at the lower end and non-U.S. dollar denominated bond products at the high end. As a result, our revenues are dependent on the value and composition of the assets under our management, all of which are subject to substantial fluctuation due to many factors, including:

- Investor Mobility. Our investors generally may withdraw their funds at any time, without advance notice and with little to no significant penalty.
- General Market Declines. We derive a significant portion of our revenues from advisory fees on sponsored portfolios. A downturn in stock or bond prices would cause the value of assets under our management to decrease, and may also cause investors to withdraw their investments, thereby further decreasing the level of assets under our management. A decline in equity market valuations may cause investors to transition to lower-fee portfolios such as fixed income, reducing our overall profitability. In addition, international markets, particularly emerging markets, which are often smaller, may not have the liquidity of established markets, may lack established regulations, and may experience significantly more volatility than established markets.
- Investment Performance. If the investment performance of our managed investment portfolios is less than that of our competitors or applicable third-party benchmarks, we could lose existing and potential customers and suffer a decrease in assets under management. Institutional investors in particular, consider changing investment advisers based upon poor relative investment performance. Individual investors in contrast are more likely to react to poor absolute investment performance.
- Capacity Constraints. Prolonged periods of strong relative investment performance and/or strong investor inflows has resulted in and may result in capacity constraints within certain strategies, which can lead to, among other things, the closure of those strategies from additional investor inflows. If certain of our strategies are capacity constrained, our investment results in subsequent periods may be negatively impacted.
- Investing Trends. Changes in investing trends, particularly investor preference for passive or alternative investment products, and in retirement savings trends, including the prevalence of defined contribution retirement plans and target date retirement products, may reduce interest in our products and may alter our mix of assets under management.
- Interest Rate Changes. Investor interest in and the valuation of our fixed income investment funds and portfolios are affected by changes in interest rates.


## Table of Contents

- Geo-Political Exposure. Our managed investment portfolios may have significant investments in international markets that are subject to risk of loss from political or diplomatic developments, government policies, civil unrest, currency fluctuations, and changes in legislation related to foreign ownership.

A decrease in the value of assets under our management, or an adverse change in their composition, could have a material adverse effect on our investment advisory fees and revenues. For any period in which revenues decline, net income and operating margins will likely decline by a greater proportion because certain expenses will be fixed over that finite period and may not decrease in proportion to the decrease in revenues.

## A significant majority of our revenues are based on contracts with the U.S. mutual funds that are subject to termination without cause and on short notice.

We provide investment advisory, distribution, and other administrative services to the U.S. mutual funds under various agreements. Investment advisory services are provided to each T . Rowe Price mutual fund under individual investment management agreements. The Board of each T. Rowe Price mutual fund must annually approve the terms of the investment management and service agreements and can terminate the agreement upon 60 -days' notice. If a T . Rowe Price mutual fund seeks to lower the fees that we receive or terminate its contract with us, we would experience a decline in fees earned from the U.S. mutual funds, which could have a material adverse effect on our revenues and net income.

## We operate in an intensely competitive industry. Competitive pressures may result in a loss of customers and their assets or compel us to reduce the fees we charge to clients, thereby reducing our revenues and net income.

We are subject to competition in all aspects of our business from other financial institutions. Many of these financial institutions have substantially greater resources than we do and may offer a broader range of financial products across more markets. Some competitors operate in a different regulatory environment than we do which may give them certain competitive advantages in the investment products and portfolio structures that they offer. We compete with other providers of investment advisory services primarily based on the availability and objectives of the investment products offered, investment performance, fees and related expenses, and the scope and quality of investment advice and other client services. Some institutions have proprietary products and distribution channels that make it more difficult for us to compete with them. Most of our investment products are available without sales or redemption fees, which means that investors may be more willing to transfer assets to competing products.

The market environment in recent years has led investors to increasingly favor lower fee passive investment products. As a result, investment advisors that emphasize passive products have gained and may continue to gain market share from active managers like us. While we believe there will always be demand for good active management, we cannot predict how much market share these competitors will gain.

If current or potential customers decide to move their assets to one of our competitors, we could face a significant decline in market share, assets under management, revenues, and net income. In the event that we decide to reduce the fees we charge for investment advisory services in response to competitive pressures, which we have done selectively in the past, revenues and operating margins could be adversely impacted.

## Our success depends on our key personnel and our financial performance could be negatively affected by the loss of their services.

Our success depends on our highly skilled personnel, including our portfolio managers, investment analysts, sales and client relationship personnel, and corporate officers, many of whom have specialized expertise and extensive experience in our industry. Strong financial services professionals are in demand, and we face significant competition for highly qualified employees. Our U.S.-based associates do not have employment contracts, while our associates outside the U.S. have employment contracts where basic employment terms are confirmed in writing. Generally our associates can terminate their employment with us at any time. We cannot assure that we will be able to attract or retain key personnel.

Page 12

## Table of Contents

Due to the global nature of our investment advisory business, our key personnel may have reasons to travel to regions susceptible to higher risk of civil unrest, organized crime or terrorism and we may be unable to ensure the safety of personnel traveling to these regions. We have near- and long-term succession planning processes, including programs to develop our future leaders, which are intended to address future talent needs and minimize the impact of losing key talent. However, in order to retain or replace our key personnel, we may be required to increase compensation, which would decrease net income. The loss of key personnel could damage our reputation and make it more difficult to retain and attract new employees and investors. Losses of assets from our client investors would decrease our revenues and net income, possibly materially.

## Our operations are complex and a failure to perform operational processes could have an adverse effect on our reputation and decrease our revenues.

We provide investment management, product administration, product recordkeeping, and tax reporting services to our clients. In certain cases, we rely on third-party vendors in the execution and delivery of these services. There can be no assurance that these vendors will properly perform these processes or that there will not be interruptions in services from these third parties. Failure to properly execute or oversee these services could subject us to regulatory sanctions, fines, penalties, or litigation.

New investment products we introduce could increase the risk that our existing systems may not be adequate to control the risks introduced by such new investment products. In addition, our information systems and technology platforms might not be able to accommodate our continued growth, and the cost of maintaining such systems might increase from its current level. Materialization of these risks could disrupt our operations, increase our expenses or result in financial exposure, regulatory inquiry or reputational damage.

## Any damage to our reputation could harm our business and lead to a loss of revenues and net income.

We have spent many years developing our reputation for integrity, strong investment performance, and superior client service. Our brand is a valuable intangible asset, but it is vulnerable to a variety of threats that can be difficult or impossible to control, and costly or even impossible to remediate. Regulatory inquiries and rumors can tarnish or substantially damage our reputation, even if those inquiries are satisfactorily addressed. Additionally, we are subject to the risk that our employees or third parties acting on our behalf may circumvent controls or act in a manner inconsistent with our policies and procedures. Real or perceived conflicts between our clients' interests and our own, as well as any fraudulent activity or other exposure of client assets or information, may impair our reputation and subject us to litigation or regulatory action. Any damage to our brand could impede our ability to attract and retain customers and key personnel, and reduce the amount of assets under our management, any of which could have a material adverse effect on our revenues and net income.

## Our expenses are subject to significant fluctuations that could materially decrease net income.

Our operating results are dependent on the level of our expenses, which can vary significantly for many reasons, including:

- expenses incurred in connection with our multi-year strategic plan to strengthen our long-term competitive position;
- variations in the level of total compensation expense due to, among other things, changes in bonuses, stock-based awards, changes in employee benefit costs due to regulatory or plan design changes, changes in our employee count and mix, competitive factors, market performance, and inflation;
- changes in the level of our advertising and promotion expenses, including the costs of expanding investment advisory services to investors outside of the U.S. and further penetrating U.S. distribution channels;
- expenses and capital costs incurred to maintain and enhance our administrative and operating services infrastructure, such as technology assets, depreciation, amortization, and research and development;
- changes in the costs incurred for third-party vendors that perform certain administrative and operating services;
- a future impairment of investments that is recognized in our consolidated balance sheet;
- a future impairment of goodwill that is recognized in our consolidated balance sheet;


## Table of Contents

- unanticipated material fluctuations in foreign currency exchange rates applicable to the costs of our operations abroad;
- unanticipated costs incurred to protect investor accounts and client goodwill; and
- disruptions of third-party services such as communications, power, and mutual fund transfer agent, investment management, trading, and accounting systems.

Under our agreements with the U.S. mutual funds, we charge the funds certain administrative fees and related expenses based upon contracted terms. If we fail to accurately estimate our underlying expense levels or are required to incur expenses relating to the mutual funds that are not otherwise paid by the funds, our operating results will be adversely affected. While we are under no obligation to provide financial support to any T . Rowe Price investment products, any financial support provided would reduce capital available for other purposes and may have an adverse effect on revenues and net income.

## Amendments to Tax Laws may impact the marketability of the products and services we offer our clients or the financial position of the company.

We are subject to income taxes as well as non-income based taxes in both the United States and various foreign jurisdictions. We cannot predict future changes in the tax regulations to which we are subject, and these regulations could have a material impact on our liability or result in increased costs of our tax compliance efforts. Additionally, changes in the status of tax deferred investment options, including retirement plans, tax-free municipal bonds, the capital gains and corporate dividend tax rates, and other individual and corporate tax rates could cause investors to view certain investment products less favorably and reduce investor demand for products and services we offer, which could have an adverse effect on our assets under management and revenues.

## Examinations and audits by tax authorities could result in additional tax payments for prior periods.

Based on the global nature of our business, from time to time we are subject to tax audits in various jurisdictions. The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations in a multitude of jurisdictions across our global operations. Tax authorities may disagree with certain positions we have taken and assess additional taxes (and, in certain cases, interest, fines, or penalties). We have a process to evaluate whether to record tax liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional income taxes will be due. We adjust these liabilities in light of changing facts and circumstances. Due to the complexity of some of these uncertainties, however, the ultimate resolution may result in a payment that is materially different from our estimates.

## We have contracted with third-party financial intermediaries that distribute our investment products in the U.S. and abroad and such relationships may not be available or profitable to us in the future.

These contracted third-party intermediaries generally offer their clients various investment products in addition to, and in competition with, our investment products, and have no contractual obligation to encourage investment in our products. It would be difficult for us to acquire or retain the management of those assets without the assistance of the intermediaries, and we cannot assure that we will be able to maintain an adequate number of investment product offerings and successful distribution relationships. In addition, some investors rely on third-party financial planners, registered investment advisers, and other consultants or financial professionals to advise them on the choice of investment adviser and investment product. These professionals and consultants can favor a competing investment product as better meeting their particular clients' needs. We cannot assure that our investment products will be among their recommended choices in the future. Further, their recommendations can change over time and we could lose their recommendation and their clients' assets under our management. Mergers, acquisitions, and other ownership or management changes could also adversely impact our relationships with these third-party intermediaries. The presence of any of the adverse conditions discussed above would reduce revenues and net income, possibly by material amounts.

## Natural disasters and other unpredictable events could adversely affect our operations.

Armed conflicts, terrorist attacks, cyber-attacks, power failures, climate change, and natural disasters could adversely affect our revenues, expenses, and net income by:

- decreasing investment valuations in, and returns on, the investment portfolios that we manage,


## Table of Contents

- causing disruptions in national or global economies that decrease investor confidence and make investment products generally less attractive,
- incapacitating or inflicting losses of lives among our employees,
- interrupting our business operations or those of critical service providers,
- triggering technology delays or failures, and
- requiring substantial capital expenditures and operating expenses to remediate damage, replace our facilities, and restore our operations.

A significant portion of our business operations are concentrated in the Baltimore, Maryland region and in London, England. We have developed various backup systems and contingency plans but we cannot be assured that those preparations will be adequate in all circumstances that could arise, or that material interruptions and disruptions will not occur. We also rely to varying degrees on outside vendors for service delivery in addition to technology and disaster contingency support, and we cannot be assured that these vendors will be able to perform in an adequate and timely manner. If we lose the availability of any associates, or if we are unable to respond adequately to such an event in a timely manner, we may be unable to timely resume our business operations, which could lead to a tarnished reputation and loss of customers that results in a decrease in assets under management, lower revenues, and materially reduced net income.

## Our investment income and asset levels may be negatively impacted by fluctuations in our investment portfolio.

We currently have a substantial investment portfolio. All of these investments are subject to investment market risk and our non-operating investment income could be adversely affected by the realization of losses upon the disposition of our investments or the recognition of significant impairments and the recognition of unrealized losses related to T. Rowe Price products that are consolidated or accounted for under the equity method. In addition, related investment income has fluctuated significantly over the years depending upon the performance of our corporate investments, including the impact of market conditions and interest rates, and the size of our corporate money market and longer-term mutual fund holdings. Fluctuations in other investment income are expected to occur in the future.

## We may review and pursue acquisition and investment opportunities in order to maintain or enhance our competitive position and these could pose risks.

We consider opportunistic acquisitions to grow existing business, add new technologies, or expand distribution. We cannot be certain that we will be able to identify, consummate and successfully integrate acquisitions, and no assurance can be given with respect to the timing, likelihood or business effect of any possible transaction. Any strategic transaction can involve a number of risks, including additional demands on our staff; unanticipated problems regarding integration of investor account and investment security recordkeeping, additional or new regulatory requirements, operating facilities and technologies, and new employees; adverse effects on earnings in the event acquired intangible assets or goodwill become impaired; and the existence of liabilities or contingencies not disclosed to or otherwise known by us prior to closing a transaction.

We own a $26 \%$ investment in UTI Asset Management Company Ltd ("UTI"), an Indian asset management company, and we may consider noncontrolling minority investments in other entities in the future. We may not realize future returns from such investments or any collaborative activities that may develop in the future.

## We are exposed to risks arising from our international operations.

We operate in a number of jurisdictions outside of the U.S. and have an equity investment in UTI. Our international operations require us to comply with the legal and regulatory requirements of various foreign jurisdictions and expose us to the political consequences of operating in foreign jurisdictions. Our foreign business operations are also subject to the following risks:

- difficulty in managing, operating, and marketing our international operations;
- fluctuations in currency exchange rates which may result in substantial negative effects on assets under our management, revenues, expenses, and assets in our U.S. dollar based financial statements; and


## Table of Contents

- significant adverse changes in international legal and regulatory environments.


## The quantitative models we use may contain errors, which could result in financial losses or adversely impact product performance and client relationships.

We use various quantitative models to support investment decisions and processes, including those related to risk assessment, portfolio management, and activities. Any errors in the underlying models or model assumptions could have unanticipated and adverse consequences on our business and reputation.

## LEGAL AND REGULATORY RISKS.

## Compliance within a complex regulatory environment imposes significant financial and strategic costs on our business, and noncompliance could result in fines and penalties.

If we are unable to maintain compliance with applicable laws and regulations, we could be subject to criminal and civil liability, the suspension of our employees, fines, penalties, sanctions, injunctive relief, exclusion from certain markets, or temporary or permanent loss of licenses or registrations necessary to conduct our business. A regulatory proceeding, even if it does not result in a finding of wrongdoing or sanctions, could consume substantial expenditures of time and capital. Any regulatory investigation and any failure to maintain compliance with applicable laws and regulations could severely damage our reputation, adversely affect our ability to conduct business, and decrease revenue and net income.

Legal and regulatory developments in the mutual fund and investment advisory industry could increase our regulatory burden, impose significant financial and strategic costs on our business, and cause a loss of, or impact the servicing of, our clients and fund shareholders.

Our regulatory environment is frequently altered by new regulations and by revisions to, and evolving interpretations of, existing regulations. New regulations present areas of uncertainty susceptible to alternative interpretations; regulators and prospective litigants may not agree with reasoned interpretations we adopt. Future changes could require us to modify or curtail our investment offerings and business operations, or impact our expenses and profitability. Additionally, some regulations may not directly apply to our business but may impact the capital markets, service providers or have other indirect effects on our ability to provide services to our clients.

Potential impacts of current or proposed legal or regulatory requirements include, without limitation, the following:

- As part of the debate in Washington, D.C. and in state legislatures, there has been increasing focus on the framework of the U.S. retirement system. We could experience adverse business impacts if legislative and regulatory changes limit retirement plans to certain products and services, or favor certain investment vehicles, that we do not offer or are not core to our business
- There has been substantial regulatory and legislative activity at federal and state levels regarding standards of care for financial services firms, related to both retirement and taxable accounts. This includes the U.S. Department of Labor's ("DOL") adoption of a fiduciary rule that was ultimately struck down by the Fifth Circuit Court of Appeals and the SEC's proposal of a package of related rules and interpretations. The ultimate action taken by the DOL, SEC or other applicable regulatory or legislative body may impact our business activities and increase our costs.
- The Federal Reserve Board has adopted final regulations related to non-bank Systemically Important Financial Institutions ("SIFIs"), and other jurisdictions are contemplating similar regulation. It has been suggested that large mutual funds, particularly money market funds, should be designated as SIFIs. We do not believe that mutual funds should be deemed SIFIs. Further, we do not believe the SIFI designation was intended for traditional asset management businesses. However, if any T. Rowe Price fund or T. Rowe Price affiliate is deemed a SIFI, increased regulatory oversight would apply, which may include enhanced capital, liquidity, leverage, stress testing, resolution planning, and risk management requirements.
- The Commodity Futures Trading Commission has adopted certain amendments to its rules that would limit the ability of T. Rowe Price investment products to use commodities, futures, swaps, and other derivatives


## Table of Contents

without additional registration. If we are required to register, we would be subject to additional regulatory requirements and costs associated with registration.

- There has been increased global regulatory focus on the manner in which intermediaries are paid for distribution of mutual funds. Changes to long-standing market practices related to fees or enhanced disclosure requirements may negatively impact sales of mutual funds by intermediaries, especially if such requirements are not applied to other investment products.
- We remain subject to various state, federal and international laws and regulations related to data privacy and protection of data we maintain concerning our customers and employees. These requirements continue to evolve. For example, the European Union has adopted changes, effective in May 2018, which, among other things, significantly increased the potential penalties for non-compliance.
- Global regulations on over the counter derivatives are evolving, including new and proposed regulations under The Dodd-Frank Wall Street Reform and Consumer Protection Act and European Market Infrastructure Regulation relating to central clearing counterparties, trade reporting, and repositories. In addition, the SEC has adopted new regulations that will require mutual funds to adopt liquidity risk management programs with specific requirements for measuring and reporting the liquidity of fund holdings. Uncertainty related to requirements of existing regulations as well as yet to be finalized regulations may have negative impacts on currently offered investment strategies.
- The revised Markets in Financial Instruments Directive ("MiFID II Directive") and Regulation ("MiFIR") (together "MiFID II") applied across the European Union ("EU") and member states of the European Economic Area began on January 3, 2018. Implementation of MiFID II has significantly impacted both the structure and operation of EU financial markets. Some of the main changes introduced under MiFID II include applying enhanced disclosure requirements, enhancing conduct of business and governance requirements, broadening the scope of pre and post trade transparency, increasing transaction reporting requirements, transforming the relationship between client commissions and research, and further regulation of trading venues. Compliance with MiFID II has increased our costs, as we began to pay for third-party investment research used by our UK-based investment manager, T. Rowe Price International Ltd, in 2018.

We cannot predict the nature of future changes to the legal and regulatory requirements applicable to our business, nor the extent of the impacts that will result from current or future proposals. However, any such changes are likely to increase the costs of compliance and the complexity of our operations. They may also result in changes to our product or service offerings. The changing regulatory landscape may also impact a number of our service providers and, to the extent such providers alter their services or increase their fees, it may impact our expenses or those of the products we offer.

## We may become involved in legal and regulatory proceedings that may not be covered by insurance.

We are subject to regulatory and governmental inquiries and civil litigation. An adverse outcome of any such proceeding could involve substantial financial penalties. From time to time, various claims against us arise in the ordinary course of business, including employment-related claims. There also has been an increase in litigation and in regulatory investigations in the financial services industry in recent years, including customer claims, class action suits, and government actions alleging substantial monetary damages and penalties.

We carry insurance in amounts and under terms that we believe are appropriate. We cannot be assured that our insurance will cover every liability and loss to which we may be exposed, or that our insurance policies will continue to be available at acceptable terms and fees. Certain insurance coverage may not be available or may be prohibitively expensive in future periods. As our insurance policies come up for renewal, we may need to assume higher deductibles or co-insurance liabilities, or pay higher premiums, which would increase our expenses and reduce our net income.

## Net capital requirements may impede the business operations of our subsidiaries.

Certain of our subsidiaries are subject to net capital requirements imposed by various federal, state, and foreign authorities. Each of our subsidiaries' net capital meets or exceeds all current minimum requirements; however, a significant change in the required net capital, an operating loss, or an extraordinary charge against net capital could

## Table of Contents

adversely affect the ability of our subsidiaries to expand or maintain their operations if we were unable to make additional investments in them.

## United Kingdom exit from European Union.

We have a significant locally authorized and regulated presence in the United Kingdom ("UK") to support our global investment management business. The ultimate impact of the UK exit ("Brexit") from the European Union ("EU"), on our business operations in the UK and Europe could vary depending on the details of the separation agreement. While we cannot predict the outcome at this time, we are in the process of realigning our EU and UK operations so that we are as prepared if the EU and UK are unable to reach a separation agreement. We remain committed to our clients, associates and business expansion across the region.

## TECHNOLOGY RISKS.

## We require specialized technology to operate our business and would be adversely affected if we fail to maintain adequate infrastructure to conduct or expand our operations or if our technology became inoperative or obsolete.

We depend on highly specialized and, in many cases, proprietary or third-party licensed technology to support our business functions, including among others:

- securities analysis,
- securities trading,
- portfolio management,
- customer service,
- accounting and internal financial reporting processes and controls, and
- regulatory compliance and reporting.

All of our technology systems, including those provided by vendors, are vulnerable to disability or failures due to cyber-attacks, natural disasters, power failures, acts of war or terrorism, sabotage, and other causes. A suspension or termination of vendor-provided software licenses or related support, upgrades, and maintenance could cause system delays or interruption. Although we have robust business and disaster recovery plans, if our technology systems were to fail and we were unable to recover in a timely way, we would be unable to fulfill critical business functions, which could lead to a loss of customers and could harm our reputation. A technological breakdown could also interfere with our ability to comply with financial reporting and other regulatory requirements, exposing us to disciplinary action and liability to our customers.

In addition, our continued success depends on our ability to effectively integrate operations across many countries, and to adopt new or adapt existing technologies to meet client, industry, and regulatory demands. We might be required to make significant capital expenditures to maintain competitive infrastructure. If we are unable to upgrade our infrastructure in a timely fashion, we might lose customers and fail to maintain regulatory compliance, which could affect our results of operations and severely damage our reputation.

## A cyberattack or a failure to implement effective information and cybersecurity policies, procedures and capabilities could disrupt operations and cause financial losses.

We are dependent on the effectiveness of the information and cybersecurity policies, procedures and capabilities we maintain to protect our systems and data. An externally caused information security incident, such as a cyberattack, a phishing scam, virus, or denial-of-service attack, could materially interrupt business operations or cause disclosure or modification of sensitive or confidential client or competitive information. In addition, our third-party vendors could be subject to a successful cyberattack or other information security event, and we cannot ensure that such third parties have all appropriate controls in place to protect the confidentiality of information in the custody of those vendors. Should our technology operations be compromised, we may have to make significant investments to upgrade, repair or replace our technology infrastructure and may not be able to make such investments on a timely basis. Although we maintain insurance coverage that we believe is reasonable, prudent and

## Table of Contents

adequate for the purpose of our business, it may be insufficient to protect us against all losses and costs stemming from breaches of security, cyberattacks and other types of unlawful activity, or any resulting disruptions from such events.

## We could be subject to losses if we fail to properly safeguard sensitive and confidential information.

As part of our normal operations, we maintain and transmit confidential information about our clients, as well as, proprietary information relating to our business operations. We maintain a system of internal controls designed to provide reasonable assurance that fraudulent activity, including misappropriation of assets, fraudulent financial reporting, and unauthorized access to sensitive or confidential data is either prevented or detected in a timely manner. We also leverage cloud-based solutions for the transmission and storage of this information. Our systems, or those of thirdparty service providers we may use to maintain and transmit such information, could be victimized by unauthorized users or corrupted by computer viruses or other malicious software code. Additionally, authorized persons could inadvertently or intentionally release confidential or proprietary information. Such disclosure could, among other things:

- seriously damage our reputation,
- allow competitors access to our proprietary business information,
- subject us to liability for a failure to safeguard client data,
- result in the termination of contracts by our existing customers,
- subject us to regulatory action, and
- require significant capital and operating expenditures to investigate and remediate the breach.

Furthermore, if any person, including any of our employees, negligently disregards or intentionally breaches our established controls with respect to client data, or otherwise mismanages or misappropriates that data, we could be subject to significant monetary damages, regulatory enforcement actions, fines and/or criminal prosecution in one or more jurisdictions.

We are subject to numerous laws and regulations designed to protect this information, such as U.S. federal and state laws and foreign regulations governing the protection of client data. In addition to GDPR, other governmental authorities throughout the U.S. and around the world are considering similar types of legislative and regulatory proposals concerning data protection. For example, in June 2018, the State of California enacted the California Consumer Privacy Act of 2018 ("the CCPA"), which will come into effect on January 1, 2020. The CCPA requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices, and allows consumers to opt out of certain data sharing with third parties and provides a new cause of action for data breaches. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination and security of data. Each of these privacy, security, and data protection laws and regulations could impose significant limitations, require changes to our business, or restrict our use or storage of personal information, which may increase our compliance expenses and make our business more costly or less efficient to conduct.

## Item 1B. Unresolved Staff Comments.

None.

## Item 2. Properties.

Our corporate headquarters occupies 472,000 square feet of space under lease until 2027 at 100 East Pratt Street in Baltimore, Maryland. We have offices in 16 countries around the world, including the U.S.

Our operating and servicing activities are largely conducted at owned facilities in campus settings comprising 1.2 million square feet on three parcels of land in close proximity to Baltimore in Owings Mills, Maryland, and about 290,000 square feet in Colorado Springs, Colorado. We also maintain a nearly 60,000 square foot technology support facility in Hagerstown, Maryland, and own a 72-acre parcel of land in Pasco County, Florida.

## Table of Contents

We lease all our offices outside the U.S. with London and Hong Kong being our largest, as well as our business operations recovery site and innovation center in Maryland, a sales and client relationship office in San Francisco, and our technology development center in New York City. In June 2018, we announced we would be closing our Tampa, Florida customer service call center in June 2019.

Information concerning our anticipated capital expenditures in 2019 and our future minimum rental payments under noncancelable operating leases at December 31, 2018, is set forth in the capital resources and liquidity and contractual obligations discussions in Item 7 of this Form 10-K.

## Item 3. Legal Proceedings.

On February 14, 2017, T. Rowe Price Group, Inc., T. Rowe Price Associates, Inc., T. Rowe Price Trust Company, current and former members of the management committee, and trustees of the T. Rowe Price U.S. Retirement Program were named as defendants in a lawsuit filed in the United States District Court for the District of Maryland. The lawsuit alleges breaches of ERISA's fiduciary duty and prohibited transaction provisions on behalf of a class of all participants and beneficiaries of the T. Rowe Price 401(k) Plan from February 14, 2011, to the time of judgment. The plaintiffs are seeking certification of the complaint as a class action. T. Rowe Price believes the claims are without merit and is vigorously defending the action. This matter is in the early stages of litigation and we cannot predict the eventual outcome or whether it will have a material negative impact on our financial results, or estimate the possible loss or range of loss that may arise from any negative outcome.

On April 27, 2016, certain shareholders in the T. Rowe Price Blue Chip Growth Fund, T. Rowe Price Capital Appreciation Fund, T. Rowe Price Equity Income Fund, T. Rowe Price Growth Stock Fund, T. Rowe Price International Stock Fund, T. Rowe Price High Yield Fund, T. Rowe Price New Income Fund and T. Rowe Price Small Cap Stock Fund (the "Funds") filed a Section 36(b) complaint under the caption Zoidis v. T. Rowe Price Assoc., Inc., against T. Rowe Price Associates, Inc. ("T. Rowe Price") in the United States District Court for the Northern District of California. The complaint alleges that the management fees for the identified funds are excessive because T. Rowe Price charges lower advisory fees to subadvised clients with funds in the same strategy. The complaint seeks to recover the allegedly excessive advisory fees received by $T$. Rowe Price in the year preceding the start of the lawsuit, along with investments' returns and profits. In the alternative, the complaint seeks the rescission of each fund's investment management agreement and restitution of any allegedly excessive management fees. T. Rowe Price believes the claims are without merit and is vigorously defending the action. This matter is in the discovery phase of litigation and we cannot predict the eventual outcome or whether it will have a material negative impact on our financial results, or estimate the possible loss or range of loss that may arise from any negative outcome.

In addition to the matters discussed above, various claims against us arise in the ordinary course of business, including employment-related claims. In the opinion of management, after consultation with counsel, the likelihood of an adverse determination in one or more of these pending ordinary course of business claims that would have a material adverse effect on our financial position or results of operations is remote.

## Item 4. Mine Safety Disclosures.

Not applicable.

## Item. Executive Officers of the Registrant.

The following information includes the names, ages, and positions of our executive officers as of February 13, 2019. There are no arrangements or understandings pursuant to which any person serves as an officer. The first 10 individuals are members of our management committee.

William J. Stromberg (58), President and Chief Executive Officer since 2016. Mr. Stromberg was previously the Head of Equity from 2010 to 2015 and a Vice President from 1990 to 2015.

Céline S. Dufétel (38), Chief Financial Officer and Treasurer since 2018 and a Vice President since 2017. Prior to joining the firm in 2017, Ms. Dufétel was managing director and global head of marketing, product management, and client service at Neuberger Berman, and prior to that, she was a partner and head of the North American Asset Management practice with McKinsey \& Company.

## Table of Contents

Christopher D. Alderson (56), Co-Head of Global Equity since 2017, Head of International Equity from 2009 to 2017, and a Vice President since 2002.

Scott B. David (52), Head of Individual and Retirement Plan Services and a Vice President since 2011.
Robert C.T. Higginbotham (51), Head of Global Investment Management Services since 2018, Head of Global Investment Services from 2012 to 2018, and a Vice President since 2012.

Andrew McCormick (58), Head of Fixed Income from 2019, Head of U.S. Taxable Bond from 2013 to 2018, and a Vice President since 2008.
David Oestreicher, (51), Chief Legal Counsel since 2008, Corporate Secretary since 2012, and a Vice President since 2001.
Sebastien Page (42), Head of Global Multi-Asset and a Vice President since 2015. From 2010 through 2015, Mr. Page was an executive vice president at PIMCO, where he led a team focused on research and development of multi-asset solutions.

Robert W. Sharps, (47), Head of Investments since 2018, Group Chief Investment Officer since 2017, Co-Head of Global Equity from 2017 to 2018, Lead Portfolio Manager, Institutional U.S. Large-Cap Equity Growth Strategy from 2001 to 2016, and a Vice President since 2001.

Eric Veiel (47), Co-Head of Global Equity since 2018, Head of U.S. Equity from 2016 to 2018, Director of Equity Research North America from 2014 to 2015, and a Vice President since 2006.

Jessica M. Hiebler (43), Principal Accounting Officer since 2010 and a Vice President since 2009.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.
Our common stock ( $\$ .20$ par value per share) trades on the NASDAQ Global Select Market under the symbol TROW. Dividends per share during the past two years were:

|  | 1st quarter |  | 2nd quarter |  | 3rd quarter |  | 4th quarter |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | \$ | . 70 | \$ | . 70 | \$ | . 70 | \$ | . 70 |
| 2017 | \$ | . 57 | \$ | . 57 | \$ | . 57 | \$ | . 57 |

Our common stockholders have approved all of our equity-based compensation plans. These plans provide for the following issuances of shares of our common stock at December 31, 2018:

|  | Employee and non-employee director plans | Employee stock purchase plan | Total |
| :---: | :---: | :---: | :---: |
| Exercise of outstanding options | 11,300,393 | - | 11,300,393 |
| Settlement of outstanding restricted stock units | 6,651,559 | - | 6,651,559 |
| Future issuances | 20,024,786 | 2,340,343 | 22,365,129 |
| Total | 37,976,738 | 2,340,343 | 40,317,081 |

The outstanding options included in the table above have a weighted-average exercise price of $\$ 69.05$. Under the terms of the 2012 Long-Term Incentive Plan, approved by stockholders in April 2012, the number of shares provided and available for future issuance will increase as we repurchase common stock in the future with the proceeds from stock option exercises. No shares have been issued under our Employee Stock Purchase Plan since its inception; all shares have been purchased in the open market.

The following table presents repurchase activity during the fourth quarter of 2018.

| Month | Total number of shares purchased | Average price paid per share |  | Total number of shares purchased as part of publicly announced program | Maximum number of shares that may yet be purchased under the program |
| :---: | :---: | :---: | :---: | :---: | :---: |
| October | 2,568,894 | \$ | 100.36 | 2,553,865 | 17,276,682 |
| November | 727,394 | \$ | 94.66 | 721,129 | 16,555,553 |
| December | 2,353,584 | \$ | 90.85 | 2,207,747 | 14,347,806 |
| Total | 5,649,872 | \$ | 95.67 | 5,482,741 |  |

Shares repurchased by us in a quarter may include repurchases conducted pursuant to publicly announced Board authorizations, outstanding shares surrendered to the company to pay the exercise price in connection with swap exercises of employee stock options and shares withheld to cover the minimum tax withholding obligation associated with the vesting of restricted stock awards. Of the total number of shares purchased during the fourth quarter of $2018,44,511$ were related to shares surrendered in connection with employee stock option exercises and 122,620 were related to shares withheld to cover tax withholdings associated with the vesting of restricted stock awards.

The remaining $5,482,741$ shares of our common stock purchased during the fourth quarter of 2018 were repurchased pursuant to the Board of Directors' December 6, 2016, publicly announced authorization. The maximum number of shares that may yet be purchased as of December 31, 2018, under the Board of Directors' December 6, 2016, and April 26, 2018, publicly announced authorizations is $14,347,806$. On February 12, 2019, the Board of Directors approved an authorization to repurchase an additional 10 million shares of common stock.

We have 7,480 stockholders of record and approximately 213,000 beneficial stockholder accounts held by brokers, banks, and other intermediaries holding our common stock. Common stock owned outright by our associates,

Page 22

## Table of Contents

combined with outstanding vested stock options and unvested restricted stock awards, total $13 \%$ of our outstanding stock and outstanding vested stock options at December 31, 2018.

## Item 6. Selected Financial Data.

|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (in millions, except per-share data) |  |  |  |  |  |  |  |  |  |
| Net revenues ${ }^{(1)}$ | \$ | 5,373 | \$ | 4,855 | \$ | 4,285 | \$ | 4,201 | \$ | 3,982 |
| Net operating income | \$ | 2,361 | \$ | 2,109 | \$ | 1,733 | \$ | 1,899 | \$ | 1,891 |
| Net income | \$ | 1,769 | \$ | 1,581 | \$ | 1,254 | \$ | 1,223 | \$ | 1,230 |
| Net income (loss) attributable to redeemable noncontrolling interests | \$ | (69) | \$ | 83 | \$ | 39 | \$ | - | \$ | - |
| Net income attributable to T. Rowe Price Group | \$ | 1,838 | \$ | 1,498 | \$ | 1,215 | \$ | 1,223 | \$ | 1,230 |
| Adjusted net income attributable to <br> T. Rowe Price Group ${ }^{(2)}$ | \$ | 1,807 | \$ | 1,361 | \$ | 1,149 | \$ | 1,160 | \$ | 1,161 |
| Per common share information |  |  |  |  |  |  |  |  |  |  |
| Basic earnings | \$ | 7.41 | \$ | 6.07 | \$ | 4.85 | \$ | 4.74 | \$ | 4.68 |
| Diluted earnings | \$ | 7.27 | \$ | 5.97 | \$ | 4.75 | \$ | 4.63 | \$ | 4.55 |
| Adjusted diluted earnings ${ }^{(2)}$ | \$ | 7.15 | \$ | 5.43 | \$ | 4.49 | \$ | 4.39 | \$ | 4.29 |
| Cash dividends declared ${ }^{(3)}$ | \$ | 2.80 | \$ | 2.28 | \$ | 2.16 | \$ | 4.08 | \$ | 1.76 |
| Weighted-average common shares outstanding |  | 242.2 |  | 241.2 |  | 245.5 |  | 254.6 |  | 259.6 |
| Weighted-average common shares outstanding assuming dilution |  | 246.9 |  | 245.1 |  | 250.3 |  | 260.9 |  | 267.4 |
|  | December 31, |  |  |  |  |  |  |  |  |  |
|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| Balance sheet data (in millions) |  |  |  |  |  |  |  |  |  |  |
| Total assets | \$ | 7,689 | \$ | 7,535 | \$ | 6,226 | \$ | 5,107 | \$ | 5,644 |
| Redeemable non-controlling interests | \$ | 740 | \$ | 993 | \$ | 687 | \$ | - | \$ | - |
| Stockholders' equity | \$ | 6,124 | \$ | 5,824 | \$ | 5,009 | \$ | 4,762 | \$ | 5,395 |
| Assets under management (in billions) | \$ | 962.3 | \$ | 991.1 | \$ | 810.8 | \$ | 763.1 | \$ | 746.8 |
| ${ }^{(1)}$ Net revenues for 2017 and 2016 have been adjusted to reflect the adoption of new revenue accounting guidance on January 1, 2018. We adopted the guidance using the retrospective method, which required adjustments to be reflected as of January 1, 2016. Accordingly, net revenues for 2015 and 2014 have not been adjusted. See the New Accounting Guidance section of Note 1 to the consolidated financial statements within Item 8, Financial Statements and Supplementary Data for more information about the adoption of this guidance. |  |  |  |  |  |  |  |  |  |  |
| (2) These items represent non-GAAP financial measures that have been established in order to increase transparency for the purpose of evaluating our core business, for comparing current results with prior period results, and to enable more appropriate comparison with industry peers. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations for the definitions of these measures and the related reconciliation from U.S. GAAP. |  |  |  |  |  |  |  |  |  |  |

Page 23

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

## OVERVIEW.

Our revenues and net income are derived primarily from investment advisory services provided to individual and institutional investors in U.S. mutual funds, separately managed accounts, subadvised funds, and other T. Rowe Price products. The other T. Rowe Price products include: collective investment trusts, target date retirement trusts, open-ended investment products offered to investors outside the U.S., and products offered through variable annuity life insurance plans in the U.S.

We manage a broad range of U.S., international and global stock, bond, and money market mutual funds and other investment products, which meet the varied needs and objectives of individual and institutional investors. Investment advisory revenues depend largely on the total value and composition of assets under our management. Accordingly, fluctuations in financial markets and in the composition of assets under management affect our revenues and results of operations. We incur significant expenditures to develop new products and services and improve and expand our capabilities and distribution channels in order to attract new investment advisory clients and additional investments from our existing clients. These efforts often involve costs that precede any future revenues that we may recognize from an increase to our assets under management.

The general trend to passive investing has been persistent and accelerated in recent years, which has negatively impacted our new client inflows. However, over the long term we expect well-executed active management to play an important role for investors. In this regard, we remain debtfree with ample liquidity and resources that allow us to take advantage of attractive growth opportunities. We are investing in key capabilities, including investment professionals, technologies, and new product offerings; and, most importantly, are providing our clients with strong investment management expertise and service both now and in the future.

In 2019, we expect to advance our strategic priorities to sustain and deepen our investment talent, add investment capabilities both in terms of new strategies and new investment vehicles, expand capabilities through enhanced technology, and broaden our distribution reach globally. We currently expect our 2019 non-GAAP operating expenses to grow in the range of $4 \%$ to $7 \%$. This expense growth range factors in continued investments in the business, our cost optimization efforts, and the incremental cost of paying for all third-party investment research as and when implemented. We could elect to adjust our expense growth should unforeseen circumstances arise, including significant market movements.

## MARKET TRENDS.

U.S. stocks declined in 2018, the worst year for the U.S. equity market since 2008. Stocks rose for much of the year, but market volatilitystemming from rising short-term interest rates and heightened global trade tensions, especially between the U.S. and China-was relatively high. While most major U.S. stock indexes reached all-time highs around the end of the third quarter, equities plunged in the final months of the year, with several indexes falling into or close to bear market territory down at least $20 \%$ from recent highs by the end of the year. The market faltered amid forecasts for slowing corporate earnings growth in 2019 and fears that the Federal Reserve would continue to raise interest rates in 2019 even if indications of softness in the U.S. economy emerge.

Stocks in developed non-U.S. equity markets fared worse than U.S. shares. Japanese shares dropped almost $13 \%$, as the export-oriented country was hurt by global trade tensions throughout the year and Japan's economic contraction in the third quarter. European stocks declined over $14 \%$ in U.S. dollar terms amid political turmoil, slowing growth, and global trade tensions.

Emerging markets stocks performed slightly worse than shares in developed non-U.S. markets. In Asia, global trade tensions hurt several emerging markets significantly. In emerging Europe, Turkish stocks plummeted roughly $41 \%$ as the lira plunged due to factors such as elevated inflation and tensions with the U.S. In Latin America, Brazilian shares ended the year nearly flat after a fourth-quarter surge on optimism that Brazil's newly elected president will pursue business-friendly policies and pension reform. Mexican stocks fell about $15 \%$ amid concerns about the governing style of the country's new president.

Results of several major equity market indexes for 2018 are as follows:

| S\&P 500 Index | $(4.4) \%$ |
| :--- | :---: |
| NASDAQ Composite Index ${ }^{(1)}$ | $(3.9) \%$ |
| Russell 2000 Index | $(11.0) \%$ |
| MSCI EAFE (Europe, Australasia, and Far East) Index | $(13.4) \%$ |
| MSCI Emerging Markets Index | $(14.3) \%$ |
| (1) Returns exclude dividends |  |

Global bond returns were generally negative for the year. U.S. fixed income performance was mostly flat to negative, as the Federal Reserve raised the federal funds target rate four times. Treasury yields increased across all maturities; the 10 -year Treasury note yield increased from $2.40 \%$ to $2.69 \%$ during the year but decreased from seven-year highs above $3.20 \%$ in early October. In the investment-grade universe, asset- and mortgage-backed securities posted positive returns, while long-term corporate and Treasury securities declined. Municipal bonds easily outperformed taxable securities. High yield bonds fell as credit spreads-the yield differences between higher- and lower-quality bonds-widened due to late-year risk aversion.

Bond returns in developed non-U.S. markets were negative in U.S. dollar terms. While bond yields in some European markets declined and bond prices rose-especially late in the year-as investors fled equity market volatility, the stronger dollar versus the euro and the British pound hurt returns in dollar terms. Japanese government bond ("JGB") yields were little changed for the year, but a stronger yen versus the dollar lifted JGB returns to U.S. investors.

Dollar-denominated emerging markets debt declined amid poor performance stemming from rising long-term interest rates in some countries and currency weakness in most developing markets. In an attempt to defend their currencies, some emerging markets central banks were forced to raise short-term interest rates. Bonds denominated in local currencies performed worse than dollar-denominated debt.

Results of several major bond market indexes for 2018 are as follows:

| Bloomberg Barclays U.S. Aggregate Bond Index | - $\%$ |
| :--- | :---: |
| JPMorgan Global High Yield Index | $(2.4) \%$ |
| Bloomberg Barclays Municipal Bond Index | $1.3 \%$ |
| Bloomberg Barclays Global Aggregate Ex-U.S. Dollar Bond Index | $(2.2) \%$ |
| JPMorgan Emerging Markets Bond Index Plus | $(5.3) \%$ |

## ASSETS UNDER MANAGEMENT.

Assets under management ended 2018 at $\$ 962.3$ billion, a decrease of $\$ 28.8$ billion from the end of 2017. We had net cash inflows of $\$ 13.2$ billion for 2018, but market depreciation and losses, including distributions not reinvested, lowered our assets under management by $\$ 42.0$ billion. The following table details changes in our assets under management by vehicle during the last three years:

| (in billions) | U.S. mutual funds |  | Subadvised and separate accounts |  | Other investment products |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets under management at December 31, 2015 | \$ | 487.1 | \$ | 198.7 | \$ | 77.3 | \$ | 763.1 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows before client transfers |  | . 3 |  | (5.5) |  | 2.4 |  | (2.8) |
| Client transfers ${ }^{(1)}$ |  | (4.9) |  | . 3 |  | 4.6 |  | - |
| Net cash flows after client transfers |  | (4.6) |  | (5.2) |  | 7.0 |  | (2.8) |
| Net market appreciation/(depreciation) and income/ (losses) |  | 32.6 |  | 13.4 |  | 5.4 |  | 51.4 |
| Distributions not reinvested |  | (.9) |  | - |  | - |  | (.9) |
| Change during the period |  | 27.1 |  | 8.2 |  | 12.4 |  | 47.7 |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2016 |  | 514.2 |  | 206.9 |  | 89.7 |  | 810.8 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows before client transfers |  | 9.4 |  | 1.4 |  | 3.2 |  | 14.0 |
| Client transfers ${ }^{(1)}$ |  | (20.2) |  | 1.7 |  | 18.5 |  | - |
| Net cash flows after client transfers |  | (10.8) |  | 3.1 |  | 21.7 |  | 14.0 |
| Net market appreciation/(depreciation) and income/ (losses) |  | 104.6 |  | 45.2 |  | 18.2 |  | 168.0 |
| Distributions not reinvested |  | (1.7) |  | - |  | - |  | (1.7) |
| Change during the period |  | 92.1 |  | 48.3 |  | 39.9 |  | 180.3 |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2017 |  | 606.3 |  | 255.2 |  | 129.6 |  | 991.1 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows before client transfers |  | 4.4 |  | (.2) |  | 9.0 |  | 13.2 |
| Client transfers ${ }^{(1)}$ |  | (20.5) |  | 2.8 |  | 17.7 |  | - |
| Net cash flows after client transfers |  | (16.1) |  | 2.6 |  | 26.7 |  | 13.2 |
| Net market appreciation/(depreciation) and income/ (losses) |  | (22.7) |  | (7.8) |  | (8.4) |  | (38.9) |
| Distributions not reinvested |  | (3.0) |  | - |  | (.1) |  | (3.1) |
| Change during the period |  | (41.8) |  | (5.2) |  | 18.2 |  | (28.8) |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2018 | \$ | 564.5 | \$ | 250.0 | \$ | 147.8 | \$ | 962.3 |

${ }^{(1)}$ In all three years, the majority of the client transfers were from the T. Rowe Price U.S. mutual funds to the T. Rowe Price collective investment trusts, which are included in other investment products.

## Table of Contents

The following table details changes in our assets under management by asset class during the last three years:

| (in billions) | Equity |  | Fixed income, including money market |  | Multi-asset ${ }^{(1)}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets under management at December 31, 2015 | \$ | 439.4 | \$ | 110.4 | \$ | 213.3 | \$ | 763.1 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows |  | (19.6) |  | 7.6 |  | 9.2 |  | (2.8) |
| Net market appreciation and income ${ }^{(2)}$ |  | 30.8 |  | 3.2 |  | 16.5 |  | 50.5 |
| Change during the period |  | 11.2 |  | 10.8 |  | 25.7 |  | 47.7 |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2016 |  | 450.6 |  | 121.2 |  | 239.0 |  | 810.8 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows |  | (1.6) |  | 8.6 |  | 7.0 |  | 14.0 |
| Net market appreciation and income ${ }^{(2)}$ |  | 115.1 |  | 4.6 |  | 46.6 |  | 166.3 |
| Change during the period |  | 113.5 |  | 13.2 |  | 53.6 |  | 180.3 |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2017 |  | 564.1 |  | 134.4 |  | 292.6 |  | 991.1 |
|  |  |  |  |  |  |  |  |  |
| Net cash flows |  | (1.4) |  | 2.9 |  | 11.7 |  | 13.2 |
| Net market appreciation/(depreciation) and income/ (losses) ${ }^{(2)}$ |  | (22.8) |  | (1.2) |  | (18.0) |  | (42.0) |
| Change during the period |  | (24.2) |  | 1.7 |  | (6.3) |  | (28.8) |
|  |  |  |  |  |  |  |  |  |
| Assets under management at December 31, 2018 | \$ | 539.9 | \$ | 136.1 | \$ | 286.3 | \$ | 962.3 |

 columns.
${ }^{(2)}$ Reported net of distributions not reinvested.
Investment advisory clients outside the U.S. account for about 6\% of our assets under management at 2018 and 2017 and about 5\% at December 31, 2016.

Our net cash flows in 2018 and 2017 were driven by diversified inflows across distribution channels and geographies, the strength of our multiasset franchise, and positive flows into international equity and fixed income. In 2016, subadvised and separate accounts and other investment products' net cash outflows prior to client transfers were largely attributable to institutional and intermediary clients reallocating to passive investments and the impact of our closed investment strategies.

Our target date retirement products, which are included in the multi-asset totals shown above, continue to be a significant part of our assets under management. Net cash flows after client transfers shown above include $\$ 12.0$ billion in 2018, $\$ 7.1$ billion in 2017, and $\$ 8.1$ billion in 2016 from target date products. Assets under management in these products are as follows:

| (in billions) | 12/31/18 |  | 12/31/17 |  | 12/31/16 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Target date retirement U.S. mutual funds | \$ | 144.8 | \$ | 168.4 | \$ | 150.9 |
| Target date separately managed retirement accounts |  | 5.9 |  | 1.7 |  | - |
| Target date retirement trusts |  | 79.7 |  | 63.7 |  | 38.3 |
|  | \$ | 230.4 | \$ | 233.8 | \$ | 189.2 |

Page 27

## INVESTMENT PERFORMANCE.

Strong investment performance and brand awareness is a key driver to attracting and retaining assets-and to our long-term success. The percentage of our U.S. mutual funds (across primary share classes) that outperformed their comparable Morningstar median on a total return basis and that are in the top Morningstar quartile for the one-, three-, five-, and 10-years ended December 31, 2018, were:

|  | 1 year | 3 years | 5 years | 10 years |
| :---: | :---: | :---: | :---: | :---: |
| Outperformed Morningstar median ${ }^{(1)}$ |  |  |  |  |
| All funds | 66\% | 75\% | 79\% | 83\% |
| Multi-asset funds | 71\% | 96\% | 88\% | 89\% |
| Top Morningstar quartile ${ }^{(1)}$ |  |  |  |  |
| All funds | 31\% | 46\% | 51\% | 54\% |
| Multi-asset funds | 38\% | 62\% | 66\% | 79\% |


 guarantee of future results. Historically, the firm has disclosed the percentage of U.S. mutual funds (across all share classes) that outperformed their comparable Lipper averages on a total return basis and that are in the top Lipper quartile for the same periods. Investment performance results using the new measures are similar to the Lipper results.

In addition, $86 \%$ of our rated U.S. mutual funds' assets under management ended the quarter with an overall rating of four or five stars from Morningstar. The performance of our institutional strategies against their benchmarks remains competitive, especially over longer time periods.

## RESULTS OF OPERATIONS.

The following table and discussion sets forth information regarding our consolidated financial results for 2018, 2017 and 2016 on a U.S. GAAP basis as well as a non-GAAP basis. The non-GAAP basis adjusts for the impact of our consolidated T. Rowe Price investment products, the impact of market movements on the supplemental savings plan liability and related economic hedges, investment income related to certain other investments, and certain nonrecurring charges and gains.

| (in millions, except per-share data) | 2018 |  | 2017 |  | 2016 |  | 2018 Compared with 2017 |  |  | 2017 Compared with 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | hange |  |  | \% Change |  | hange | \% Change |
| U.S. GAAP basis |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment advisory fees | \$ | 4,850.6 |  |  | \$ | 4,295.8 | \$ | 3,735.0 | \$ | 554.8 | 12.9 \% | \$ | 560.8 | 15.0 \% |
| Net revenues | \$ | 5,372.6 | \$ | 4,854.9 | \$ | 4,284.8 | \$ | 517.7 | 10.7 \% | \$ | 570.1 | 13.3 \% |
| Operating expenses | \$ | 3,011.2 | \$ | 2,746.1 | \$ | 2,551.4 | \$ | 265.1 | 9.7 \% | \$ | 194.7 | 7.6 \% |
| Net operating income | \$ | 2,361.4 | \$ | 2,108.8 | \$ | 1,733.4 | \$ | 252.6 | 12.0 \% | \$ | 375.4 | 21.7 \% |
| Non-operating income ${ }^{(1)}$ | \$ | 23.2 | \$ | 396.3 | \$ | 227.1 | \$ | (373.1) | $\mathrm{n} / \mathrm{m}$ | \$ | 169.2 | $\mathrm{n} / \mathrm{m}$ |
| Net income attributable to <br> T. Rowe Price Group | \$ | 1,837.5 | \$ | 1,497.8 | \$ | 1,215.0 | \$ | 339.7 | 22.7 \% | \$ | 282.8 | 23.3 \% |
| Diluted earnings per share on common share | \$ | 7.27 | \$ | 5.97 | \$ | 4.75 | \$ | 1.30 | 21.8 \% | \$ | 1.22 | 25.7 \% |
| Weighted average common shares outstanding assuming dilution |  | 246.9 |  | 245.1 |  | 250.3 |  | 1.8 | . 7 \% |  | (5.2) | (2.1)\% |
| Adjusted non-GAAP basis ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating expenses | \$ | 3,025.5 | \$ | 2,777.7 | \$ | 2,478.7 | \$ | 247.8 | 8.9 \% | \$ | 299.0 | 12.1 \% |
| Net income attributable to <br> T. Rowe Price Group | \$ | 1,807.4 | \$ | 1,361.1 | \$ | 1,148.9 | \$ | 446.3 | 32.8 \% | \$ | 212.2 | 18.5 \% |
| Diluted earnings per share on common share | \$ | 7.15 | \$ | 5.43 | \$ | 4.49 | \$ | 1.72 | 31.7 \% | \$ | . 94 | 20.9 \% |
| Assets under management (in billions) |  |  |  |  |  |  |  |  |  |  |  |  |
| Average assets under management | \$ | 1,036.5 | \$ | 909.0 | \$ | 778.2 | \$ | 127.5 | 14.0 \% | \$ | 130.8 | 16.8 \% |
| Ending assets under management | \$ | 962.3 | \$ | 991.1 | \$ | 810.8 | \$ | (28.8) | (2.9)\% | \$ | 180.3 | 22.2 \% |
| ${ }^{(1)}$ The percentage change in non-operating income is not meaningful ( $n / m$ ). <br> ${ }^{(2)}$ See the reconciliation to the comparable U.S. GAAP measures at the end of the Results of Operations section of this Management's Discussion and Analysis. |  |  |  |  |  |  |  |  |  |  |  |  |

On January 1, 2018, we adopted new accounting guidance related to revenue recognition. We elected to adopt the new guidance on a retrospective basis, which requires 2017 and 2016 results to be recast to reflect the impact. Accordingly, the 2017 and 2016 net revenues and operating expenses presented in the table above and in the narrative that follows have been recast to reflect the impact of adopting this new accounting guidance. The new guidance requires certain revenue related expenses that are incurred in servicing our U.S. mutual funds to be recognized in operating expenses versus being presented net against the related revenues. As such, net revenues and operating expenses, primarily productrelated, were recast to reflect an increase of $\$ 61.9$ million in both 2017 and 2016.

Additionally, we modified our income statement presentation in 2018 to increase operating expense transparency and to align expenses that have similar cost drivers. Prior year amounts have been reclassified to conform to the new 2018 presentation. For more information, see Note 1 - Basis of Preparation and Summary of Significant Accounting Policies in our consolidated financial statements included later in this Annual Report on Form 10-K.

## Table of Contents

## Results Overview

Investment advisory revenues. Investment advisory revenues earned in 2018 increased 12.9\% over the comparable 2017 period as average assets under our management increased $\$ 127.5$ billion, or $14.0 \%$, to $\$ 1,036.5$ billion. The average annualized fee rate earned on our assets under management was 46.8 basis points in 2018, compared with 47.3 basis points earned in 2017. Our effective fee rate has declined in part due to client transfers to lower fee products or share classes and, to a lesser extent, fee reductions we made to certain mutual funds and other products during 2018. Further contributing to our lower effective fee rate in 2018 was a greater percentage of our assets under management in lower fee products due to lower equity valuations in the fourth quarter. We regularly assess the competitiveness of our investment advisory fees and will continue to make adjustments as deemed appropriate.

In 2017, investment advisory revenues increased $15.0 \%$ over the comparable 2016 period as average assets under our management increased $\$ 130.8$ billion, or $16.8 \%$, to $\$ 909.0$ billion. The average annualized fee rate earned on our assets under management was 47.3 basis points in 2017 , compared with 48.0 basis points earned in 2016. Our effective fee rate declined primarily due to fee rate reductions we made to certain T. Rowe Price investment products since the end of 2015, and higher equity valuations in funds with tiered individual rates which decrease as assets under management grow. This decline in effective fee rate was partially offset by higher equity valuations, which resulted in a greater percentage of our assets under management attributable to higher fee equity products. While we voluntarily waived $\$ 10.5$ million in money market related fees, including advisory fees and fund expenses in order to maintain a positive yield for investors in 2016, our voluntary fee waivers were negligible for 2017.

Over time, our effective fee rate can be impacted by market or cash flow related shifts among asset and share classes, price changes in existing products, and asset changes in products with tiered-fee structures.

Operating expenses. Operating expenses were $\$ 3,011.2$ million in 2018 compared with $\$ 2,746.1$ million in the 2017 period. On a non-GAAP basis, our operating expenses in 2018 increased $8.9 \%$ to $\$ 3,025.5$ million compared with 2017 . The increase in operating expenses was primarily due to continued strategic investments and higher bonus and stock-based compensation, which were driven by our operating results.

For 2017, operating expenses were $\$ 2,746.1$ million as compared with $\$ 2,551.4$ million in the 2016 period. On a non-GAAP basis, our operating expenses in 2017 increased $12.1 \%$ to $\$ 2,777.7$ million compared with 2016 . About one-fourth of the increase is related to variable compensation and market-driven distribution and client servicing costs as a result of the strong market performance in 2017 . The remaining change is due to our investments in the strategic initiatives announced in early 2017 and other growing operational and regulatory demands.

Our operating expenses in each of the last three years includes some financial impact related to the Dell appraisal rights matter. As further detailed in Note 13 to our consolidated financial statements, we incurred in 2016 a non-recurring charge, net of insurance recoveries, of $\$ 66.2$ million, or $\$ .15$ per share after tax related to payments we made to our clients related to the matter. Additional insurance recoveries totaling $\$ 50.0$ million, or $\$ .12$ per share after tax, were recognized in 2017 . Finally, upon receipt of a non-appealable judgment in the fourth quarter of 2018 , we recognized a reduction in operating expenses of $\$ 15.2$ million, or $\$ .05$ per share after tax, related to the recovery of a portion of the payments we made to our clients in 2016. A summary of the financial impact of the Dell appraisal rights matter on our annual pre-tax operating expenses and pre-tax operating cash flows since the matter arose is as follows:

| (in millions) | Pre-tax operating expense (income) |  | Pre-tax operating cash inflows (outflows) |  |
| :---: | :---: | :---: | :---: | :---: |
| 2016 | \$ | 66.2 | \$ | (166.2) |
| 2017 |  | (50.0) |  | 150.0 |
| 2018 |  | (15.2) |  | 15.2 |
| Total impact from Dell appraisal rights matter | \$ | 1.0 | \$ | (1.0) |

Operating margin. Our operating margin in 2018 was $44.0 \%$, compared with $43.4 \%$ in 2017 and $40.5 \%$ in 2016 . Excluding the impacts from the Dell appraisal rights matter, our operating margin was $43.7 \%$ in $2018,42.4 \%$ in 2017 and $42.0 \%$ in 2016 . The increase in our operating margins each year since 2016 is driven by the higher

## Table of Contents

percentage growth in net revenue attributable primarily to increases in our average assets under management each year compared with the percentage growth in operating expenses.

Diluted earnings per share for 2018 was $\$ 7.27$ compared with $\$ 5.97$ in 2017. The $21.8 \%$ increase in diluted earnings per share in 2018 was driven by higher operating income and the benefit realized from a lower corporate tax rate under U.S. Tax Reform. The $25.7 \%$ increase in diluted earnings per share in 2017 compared with 2016 was driven primarily from our results of operations in 2017 and fewer weighted average outstanding shares assuming dilution.

## Net revenues

|  | 2018 |  | 2017 |  | 2016 |  | 2018 Compared with 2017 |  |  | 2017 Compared with 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) |  |  | \$ Change | \% Change |  |  | \$ Change |  | \% Change |
| Investment advisory fees |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. mutual funds | \$ | 3,375.0 |  |  | \$ | 3,080.0 | \$ | 2,711.7 | \$ | 295.0 | 9.6 \% | \$ | 368.3 | 13.6\% |
| Subadvised and separate accounts and other investment products |  | 1,475.6 |  | 1,215.8 |  | 1,023.3 |  | 259.8 | 21.4 \% |  | 192.5 | 18.8\% |
|  |  | 4,850.6 |  | 4,295.8 |  | 3,735.0 |  | 554.8 | 12.9 \% |  | 560.8 | 15.0\% |
| Administrative, distribution, and servicing fees |  |  |  |  |  |  |  |  |  |  |  |  |
| Administrative fees |  | 384.0 |  | 412.1 |  | 408.1 |  | (28.1) | (6.8)\% |  | 4.0 | 1.0\% |
| Distribution and servicing fees |  | 138.0 |  | 147.0 |  | 141.7 |  | (9.0) | (6.1)\% |  | 5.3 | 3.7\% |
|  |  | 522.0 |  | 559.1 |  | 549.8 |  | (37.1) | (6.6)\% |  | 9.3 | 1.7\% |
| Net revenues | \$ | 5,372.6 | \$ | 4,854.9 | \$ | 4,284.8 | \$ | 517.7 | 10.7 \% | \$ | 570.1 | 13.3\% |

Investment advisory fees. Investment advisory fees are earned based on the value and composition of our assets under management, which change based on fluctuations in financial markets and net cash flows. As our average assets under management increase or decrease in a given period, the level of our investment advisory fee revenue for that same period generally fluctuates in a similar manner. The relationship between the change in our average assets under management for 2018, 2017 and 2016 and the change in our investment advisory fee revenue recognized during each of the same annual periods is presented below.

|  | 2018 vs 2017 |  | 2017 vs 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Increase in average assets under management | Increase in investment advisory fees | Increase in average assets under management | Increase in investment advisory fees |
| U.S. mutual funds | 9.4\% | 9.6\% | 14.7\% | 13.6\% |
| Subadvised and separate accounts and other investment products | 21.8\% | 21.4\% | 20.4\% | 18.8\% |

Over the last three years, we have reduced the management fees of certain mutual funds and other investment products. This is a contributing factor in why investment advisory revenue has generally grown slower than average assets under management in each of these vehicles over the same period. Additionally, significant client transfers from mutual funds to lower fee vehicles or among product share classes in 2017 and 2018 have contributed to the investment advisory fees associated with subadvised and separate accounts and other investment products to grow slower than the related average assets under management. Market fluctuations and net cash flows over the annual time periods have also shifted the asset and share class mix among different fee rates and products with tiered-fee structures.

Administrative, distribution, and servicing fees. Administrative, distribution, and servicing fees represent fees earned from providing administrative and distribution services to our investment advisory clients, primarily U.S. mutual funds and their investors. For 2018, these fees were $\$ 522.0$ million, a decrease of $\$ 37.1$ million from the comparable 2017 period. The decrease was primarily attributable to lower assets under management in the U.S.

Page 31

## Table of Contents

mutual funds resulting from client transfers among vehicles and share classes and the sharp market decline at the end of 2018.
For 2017, administrative, distribution, and servicing fees were $\$ 559.1$ million, an increase of $\$ 9.3$ million from the comparable 2016 period. The increase was primarily attributable to higher transfer agent and distribution servicing revenue due to client transfers among vehicles and share classes.

The distribution and servicing fees we earn are related to $12 \mathrm{~b}-1$ plans of certain classes, including the Advisor and R classes, of our U.S. mutual funds and are entirely offset by the costs paid to third-party intermediaries who source these assets. These costs are reported in the distribution and servicing cost line in the consolidated income statements.

Net revenues include the elimination of $\$ 6.2$ million for 2018, $\$ 5.6$ million for 2017, and $\$ 6.5$ million for 2016, earned from our consolidated T. Rowe Price investment products. The corresponding expenses recognized by these consolidated products were also eliminated from operating expenses.

## Operating expenses

| (in millions) | 2018 |  | 2017 |  | 2016 |  | 2018 Compared with 2017 |  |  | 2017 Compared with 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \$ Change | \% Change |  |  | \$ Change |  | \% Change |
| Compensation and related costs | \$ | 1,808.6 |  |  | \$ | 1,664.9 | \$ | 1,494.0 | \$ | 143.7 | 8.6\% | \$ | 170.9 | 11.4\% |
| Distribution and servicing costs |  | 281.2 |  | 262.6 |  | 233.4 |  | 18.6 | 7.1\% |  | 29.2 | 12.5\% |
| Advertising and promotion |  | 99.6 |  | 92.4 |  | 80.2 |  | 7.2 | 7.8\% |  | 12.2 | 15.2\% |
| Product-related costs |  | 157.1 |  | 146.0 |  | 139.7 |  | 11.1 | 7.6\% |  | 6.3 | 4.5\% |
| Technology, occupancy, and facility costs |  | 383.9 |  | 350.5 |  | 319.8 |  | 33.4 | 9.5\% |  | 30.7 | 9.6\% |
| General, administrative, and other |  | 296.0 |  | 279.7 |  | 218.1 |  | 16.3 | 5.8\% |  | 61.6 | 28.2\% |
| Nonrecurring net charges (recoveries) related to Dell appraisal rights matter ${ }^{(1)}$ |  | (15.2) |  | (50.0) |  | 66.2 |  | 34.8 | $\mathrm{n} / \mathrm{m}$ |  | (116.2) | $\mathrm{n} / \mathrm{m}$ |
| Total operating expenses | \$ | 3,011.2 | \$ | 2,746.1 | \$ | 2,551.4 | \$ | 265.1 | 9.7\% | \$ | 194.7 | 7.6\% |

${ }^{(1)}$ The percentage change in nonrecurring net charges (recoveries) related to Dell appraisal rights matter is not meaningful ( $\mathrm{n} / \mathrm{m}$ ).
Compensation and related costs. Compensation and related costs increased $\$ 143.7$ million, or $8.6 \%$, for 2018 as compared with 2017. The largest part of the increase was an increase in base salaries, benefits and related employee costs of $\$ 77.1$ million, resulting from an increase of $6.2 \%$ in average headcount, combined with a modest increase in salaries at the beginning of 2018 . Our operating results led to a $\$ 68.0$ million increase in annual variable compensation and contributed to the $\$ 45.0$ million increase in non-cash stock based compensation expense as the annual grant value was higher in 2018. Additionally, our 2018 equity grant reflected the adoption of more favorable post-retirement vesting provisions, which shifted a greater percentage of the expense related to the annual grant to be recognized for 2018 . The 2018 period also includes $\$ 9.0$ million in one-time bonuses paid to certain associates from U.S. tax reform benefits. These increases were partially offset by lower market-related expense of $\$ 30.3$ million from our supplemental savings plan and higher labor capitalization related to internally developed software.

For 2017, compensation and related costs increased $\$ 170.9$ million, or $11.4 \%$, as compared with 2016. The largest part of the change is attributable to a $\$ 116.9$ million increase in salaries and related benefit expenses, which resulted primarily from a modest increase in salaries at the beginning of 2017, combined with a $6.4 \%$ increase in average headcount from 2016. The higher employee benefit expenses also includes increased health care costs as well as greater equity award-related payroll taxes due to the significant rise in our stock price during 2017. Higher average headcount also drove up recruiting costs for 2017 compared with the 2016 period. Our annual variable compensation for the 2017 period rose $\$ 59.8$ million over the 2016 period. Stronger markets during 2017 increased the supplemental savings plan liability resulting in additional compensation expense of $\$ 21.1$ million for 2017 compared with the 2016 period. The increases in these compensation and related costs were offset in part by higher labor capitalization related to internally developed software for 2017 compared with the 2016 period, as we continue to invest in our technology capabilities. We had a reduction in our non-cash stock based compensation expense for 2017, as we shifted our annual grant from twice a year to a single grant in December.

## Table of Contents

Distribution and servicing costs. Distribution and servicing costs includes those costs incurred to distribute the T. Rowe Price products as well as client and shareholder servicing, recordkeeping, and administrative services. These costs were $\$ 281.2$ million for 2018, $\$ 262.6$ million for 2017, and $\$ 233.4$ million for 2016. The increases for 2018 from 2017 and for 2017 from 2016 are primarily driven by strong markets and net cash flows from the end of 2016 through the third quarter of 2018, which grew the assets in those share classes and products for which we pay a related distribution and servicing fee. These costs include those distribution and servicing costs paid to third-party intermediaries that source the assets of certain share classes of our U.S. mutual funds and is offset entirely by the $12 \mathrm{~b}-1$ revenue we earn and report in administrative, distribution, and servicing fees.

Advertising and promotion. Advertising and promotion costs were $\$ 99.6$ million for 2018, $\$ 92.4$ million for 2017, and $\$ 80.2$ million for 2016. The increases for 2018 from 2017 and for 2017 from 2016 are primarily driven by higher promotion and media costs as we seek to broaden our distribution efforts globally. The increase for 2018 was also impacted by the launch of a new media advertising campaign in 2018.

Product-related costs. Product-related costs consists of non-advisory related costs that we incur to service certain T. Rowe Price products. Product-related costs were $\$ 157.1$ million for 2018, an increase of $\$ 11.1$ million, or $7.6 \%$, compared with 2017 . The increase is primarily due to higher operating costs of our collective investment trusts as client transfers have increased the number of trusts and their average net assets over the last year. Also contributing to the increase were higher costs incurred to provide administrative services to the U.S. mutual funds.

Product-related costs were $\$ 146.0$ million for 2017, an increase of $\$ 6.3$ million, or $4.5 \%$, compared with 2016. The increase is primarily due to higher costs incurred to provide administrative services to the U.S. mutual funds and recordkeeping services to defined contribution retirement plans.

Technology, occupancy, and facility costs. Technology, occupancy, and facility costs consists of depreciation expense, technology equipment and maintenance, software, and costs related to our facilities. These costs were $\$ 383.9$ million for $2018, \$ 350.5$ million for 2017, and $\$ 319.8$ million for 2016. The increases for 2018 from 2017 and for 2017 from 2016 are due primarily to incremental investment in our technology capabilities, including related depreciation, hosted solution licenses, and maintenance programs, as well as expanded office facilities and new locations.

General, administrative, and other costs. General, administrative, and other costs consist of costs associated with the overall management of the firm, including information services, professional services, travel and entertainment, research costs, and other general operating expenses. These costs were $\$ 296.0$ million for 2018, $\$ 279.7$ million for 2017, and $\$ 218.1$ million for 2016. The increases for 2018 from 2017 and for 2017 from 2016 were a result of our continued investment in our strategic initiatives and other growing operational and regulatory demands on the business. Specifically, about two-thirds of the increase for 2017 as compared with 2016 was attributable to increased professional fees incurred to support these continued investments in our operational and regulatory business demands. The increased level of professional fees for 2017 did not recur for 2018.

## Non-operating income

Net non-operating investment income decreased $\$ 373.1$ million for the year ended December 31, 2018 compared with 2017 and increased $\$ 169.2$ million for the year ended December 31, 2017 compared with 2016. Net non-operating investment activity for the years ended December 31, 2018, 2017 and 2016 comprised the following:

|  |  |  |  |  |  |  |  | ed with |  | d with |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) |  | 2018 |  | 2017 |  | 216 |  |  |  |  |
| Net gains from non-consolidated T. Rowe Price investment products |  |  |  |  |  |  |  |  |  |  |
| Net realized gains on dispositions of available-for-sale investments | \$ | - | \$ | 83.1 | \$ | 53.0 | \$ | (83.1) | \$ | 30.1 |
| Ordinary and capital gain dividend distributions |  | 52.7 |  | 22.2 |  | 16.1 |  | 30.5 |  | 6.1 |
| Market gains (losses) on equity method and other investments at fair value |  | (38.5) |  | 32.5 |  | - |  | (71.0) |  | 32.5 |
| Gains reclassified from accumulated other comprehensive income upon transfer of an available-for-sale sponsored investment portfolio to sponsored investment portfolios held as trading |  | - |  | 23.6 |  | 20.8 |  | (23.6) |  | 2.8 |
| Net gain recognized upon deconsolidation |  | 3.6 |  | . 1 |  | 2.2 |  | 3.5 |  | (2.1) |
| Dividends and market gains (losses) on investment products used to hedge the supplemental savings plan liability |  | (6.1) |  | 12.3 |  | - |  | (18.4) |  | 12.3 |
| Total net gains from non-consolidated T. Rowe Price investment products |  | 11.7 |  | 173.8 |  | 92.1 |  | (162.1) |  | 81.7 |
| Other investment income |  | 107.5 |  | 24.5 |  | 15.9 |  | 83.0 |  | 8.6 |
| Net gains on investments |  | 119.2 |  | 198.3 |  | 108.0 |  | (79.1) |  | 90.3 |
| Net gains (losses) on consolidated sponsored investment portfolios |  | (92.9) |  | 193.9 |  | 121.1 |  | (286.8) |  | 72.8 |
| Other income (loss), including foreign currency gains and losses |  | (3.1) |  | 4.1 |  | (2.0) |  | (7.2) |  | 6.1 |
| Non-operating income | \$ | 23.2 | \$ | 396.3 | \$ | 227.1 | \$ | (373.1) | \$ | 169.2 |

During 2018, non-operating income included the impact of sharp market declines in the later part of 2018, which resulted in unrealized losses on our investment portfolio, including our consolidated products, compared with unrealized gains recognized during 2017. Partially offsetting these losses was the recognition during 2018 of a realized gain in other investment income associated with the sale of our 10\% holding in Daiwa SB Investments Ltd. Additionally, on January 1, 2018, we implemented new accounting guidance that eliminated the available-for-sale investment category for equity securities. As a result of this change, realized gains of $\$ 30.8$ million from the sale of certain available-for-sale investments recognized in 2017 did not reoccur in 2018.

During 2017, non-operating income included $\$ 30.8$ million in gains realized from the disposition of certain available-for-sale investments and $\$ 23.6$ million in unrealized gains recognized on T. Rowe Price trading investments that result from our decision to economically hedge the market exposure associated with our supplemental savings plan liability. In order to fund the hedge portfolio, we used the proceeds from the sale of certain available-for-sale investments in certain U.S. mutual funds as well as designated a mutual fund that was held as available-for-sale. The designation of the mutual fund as an economic hedge transferred its accounting classification from an available-for-sale security to a trading security, and resulted in the reclassification of the investment's unrealized holding gain at the date of designation to the income statement from the balance sheet where it was previously recognized.

The impact of consolidating certain T. Rowe Price investment products on the individual lines of our consolidated statements of income for 2018, 2017, and 2016 is as follows:

|  | 2018 |  | 2017 |  | 2016 |  | 2018 Compared with 2017 |  |  | 2017 Compared with 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) |  |  |  | hange |  |  | \% Change |  | ange | \% Change |
| Operating expenses reflected in net operating income | \$ | (12.7) |  |  | \$ | (12.3) | \$ | (13.0) | \$ | (.4) | 3.3 \% | \$ | . 7 | (5.4)\% |
| Net investment income (loss) reflected in non-operating income |  | (92.9) |  | 193.9 |  | 121.1 |  | (286.8) | (147.9)\% |  | 72.8 | 60.1 \% |
| Impact on income before taxes | \$ | (105.6) | \$ | 181.6 | \$ | 108.1 | \$ | $\underline{(287.2)}$ | $\underline{\text { (158.1)\% }}$ | \$ | 73.5 | $\underline{68.0}$ \% |

Net income (loss) attributable to our
interest in the consolidated T. Rowe

| Price investment products | $\$$ | $(36.8)$ | $\$$ | 98.2 | $\$$ | 69.1 | $\$$ | $(135.0)$ | $(137.5) \%$ | $\$$ | 29.1 | $42.1 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Net income (loss) attributable to redeemable non-controlling interests

| (unrelated third-party investors) |  | (68.8) |  | 83.4 |  | 39.0 |  | (152.2) | (182.5)\% |  | 44.4 | 113.8 \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Impact on income before taxes | \$ | (105.6) | \$ | 181.6 | \$ | 108.1 | \$ | (287.2) | (158.1)\% | \$ | 73.5 | 68.0 \% |

## Provision for income taxes

Our effective tax rate for 2018 was $25.8 \%$, compared with $36.9 \%$ for 2017 and $36.0 \%$ for the 2016. The decrease in our effective tax rate in 2018 from 2017 is primarily due to the reduction in the U.S. federal corporate tax rate from $35 \%$ to $21 \%$ on January 1, 2018 following the enactment on December 22, 2017, of a comprehensive U.S. tax reform bill known as the Tax Cuts and Jobs Act ("Tax Reform"). For 2018 and 2017, the income tax provision includes nonrecurring charges of $\$ 20.8$ million and $\$ 71.1$ million, respectively, related to the enactment of U.S. tax reform as we adjusted our deferred tax asset and liability estimates. The increase in tax rate in 2017 from 2016 was primarily due to the nonrecurring charges taken in 2017.

Our tax rate in 2017 and 2016 was reduced by tax benefits related to the exercise of stock options, vesting of restricted stock, and net income attributable to redeemable non-controlling interests related to our consolidated T. Rowe Price investment products, as these earnings are not taxable to us.

On April 24, 2018, the state of Maryland enacted new state tax legislation. This new state tax legislation, effective in 2018, adopted a five-year phase-in of the single sales factor method of apportionment for calculating income tax for multi-state companies doing business in Maryland and is expected to result in a net benefit over time. Accordingly, we recognized a nonrecurring charge of $\$ 7.9$ million during 2018 for the re-measurement of our deferred tax assets and liabilities to reflect the effect of this Maryland state tax legislation. Based on information currently available, we expect that the Maryland state tax legislation will reduce our effective state tax rate over the five-year phase-in period to less than $2.5 \%$.

The following table reconciles the statutory federal income tax rate to our effective tax rate for the years ended December 31, 2018, 2017, and 2016:

|  | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Statutory U.S. federal income tax rate | 21.0 \% | 35.0 \% | 35.0 \% |
| Impact of nonrecurring charge relating to U.S. tax reform | . 8 | 2.9 | - |
| Impact of nonrecurring charge related to Maryland state tax legislation | . 3 | - | - |
| State income taxes for current year, net of federal income tax benefits ${ }^{(1)}$ | 4.6 | 3.9 | 3.8 |
| Net income attributable to redeemable non-controlling interests | . 7 | (1.3) | (.7) |
| Net excess tax benefits from stock-based compensation plans activity | (1.7) | (3.0) | (1.7) |
| Other items | . 1 | (.6) | (.4) |
| Effective income tax rate | 25.8 \% | 36.9 \% | 36.0 \% |

${ }^{(1)}$ State income tax benefits are reflected in the total benefits for net income attributable to redeemable non-controlling interests and stock-based compensation plans activity.
Our effective tax rate will continue to experience volatility in future periods as the tax benefits recognized from stock-based compensation are impacted by market fluctuations in our stock price and timing of option exercises. The rate will also be impacted by changes in our consolidated investment products that are driven by market fluctuations and changes in the proportion of their net income that is attributable to non-controlling interests. We currently estimate our effective tax rate for the full-year 2019 will be in the range of $23.5 \%$ to $26.5 \%$.

## NON-GAAP INFORMATION AND RECONCILIATION.

We believe the non-GAAP financial measures below provide relevant and meaningful information to investors about our core operating results. These measures have been established in order to increase transparency for the purpose of evaluating our core business, for comparing current results with prior period results, and to enable more appropriate comparison with industry peers. However, non-GAAP financial measures should not be considered as a substitute for financial measures calculated in accordance with U.S. GAAP and may be calculated differently by other companies. Beginning in 2018, our non-GAAP adjustments no longer include non-operating income related to our cash and discretionary investments. We believe the non-GAAP financial measures below provide relevant and meaningful information to investors about our core operating results.

The following schedule reconciles U.S. GAAP financial measures to non-GAAP financial measures for each of the last five years.

| (in millions, except per-share amounts) | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating expenses, GAAP basis | \$ | 3,011.2 | \$ | 2,746.1 | \$ | 2,551.4 | \$ | 2,301.7 | \$ | 2,091.2 |
| Non-GAAP adjustments: |  |  |  |  |  |  |  |  |  |  |
| Expenses of consolidated T . Rowe Price investment products, net of elimination of our related management and administrative fees ${ }^{(1)}$ |  | (6.5) |  | (6.7) |  | (6.5) |  | - |  | - |
| Compensation expense related to market valuation changes in the supplemental savings plan liability ${ }^{(2)}$ |  | 5.6 |  | (11.7) |  | - |  | - |  | - |
| Recoveries (nonrecurring net charge) related to Dell appraisal rights matter ${ }^{(4)}$ |  | 15.2 |  | 50.0 |  | (66.2) |  | - |  | - |
| Adjusted operating expenses | \$ | 3,025.5 | \$ | 2,777.7 | \$ | 2,478.7 | \$ | 2,301.7 | \$ | 2,091.2 |
|  |  |  |  |  |  |  |  |  |  |  |
| Net income attributable to T. Rowe Price Group, GAAP basis | \$ | 1,837.5 | \$ | 1,497.8 | \$ | 1,215.0 | \$ | 1,223.0 | \$ | 1,229.6 |
| Non-GAAP adjustments: |  |  |  |  |  |  |  |  |  |  |
| Net loss (income) of consolidated T. Rowe Price investment products, net of redeemable non-controlling interests ${ }^{(1)}$ |  | 36.8 |  | (98.2) |  | (69.1) |  | (1.5) |  | - |
| Non-operating loss (income) of investments designated as an economic hedge of the supplemental savings plan liability less related compensation expense ${ }^{(2)}$ |  | . 5 |  | (.6) |  | - |  | - |  | - |
| Other non-operating income ${ }^{(3)}$ |  | (93.7) |  | (190.1) |  | (106.0) |  | (102.0) |  | (112.2) |
| Nonrecurring net charge (recoveries) related to Dell appraisal rights matter ${ }^{(4)}$ |  | (15.2) |  | (50.0) |  | 66.2 |  | - |  | - |
| Income tax impacts of non-GAAP adjustments ${ }^{(5)}$ |  | 12.8 |  | 131.1 |  | 42.8 |  | 40.8 |  | 43.9 |
| Nonrecurring charge related to enactment of U.S. tax reform ${ }^{(6)}$ |  | 20.8 |  | 71.1 |  | - |  | - |  | - |
| Nonrecurring charge related to enactment of Maryland state tax legislation ${ }^{(7)}$ |  | 7.9 |  | - |  | - |  | - |  | - |
| Adjusted net income attributable to T. Rowe Price Group | \$ | 1,807.4 | \$ | 1,361.1 | \$ | 1,148.9 | \$ | 1,160.3 | \$ | 1,161.3 |
|  |  |  |  |  |  |  |  |  |  |  |
| Diluted earnings per common share, GAAP basis | \$ | 7.27 | \$ | 5.97 | \$ | 4.75 | \$ | 4.63 | \$ | 4.55 |
| Non-GAAP adjustments: |  |  |  |  |  |  |  |  |  |  |
| Consolidated T. Rowe Price investment products ${ }^{(1)}$ |  | . 12 |  | (.24) |  | (.16) |  | (.01) |  | - |
| Other non-operating income ${ }^{(3)}$ |  | (.30) |  | (.46) |  | (.25) |  | (.23) |  | (.26) |
| Nonrecurring net charge (recoveries) related to Dell appraisal rights matter ${ }^{(4)}$ |  | (.05) |  | (.12) |  | . 15 |  | - |  | - |
| Nonrecurring charge related to enactment of U.S. tax reform ${ }^{(6)}$ |  | . 08 |  | . 28 |  | - |  | - |  | - |
| Nonrecurring charge related to enactment of Maryland state tax legislation ${ }^{(7)}$ |  | . 03 |  | - |  | - |  | - |  | - |
| Adjusted diluted earnings per common share ${ }^{(8)}$ | \$ | 7.15 | \$ | 5.43 | \$ | 4.49 | \$ | 4.39 | \$ | 4.29 |

${ }^{(1)}$ The non-GAAP adjustments add back the management fees that we earn from the consolidated T. Rowe Price investment products and subtract the investment income and operating expenses of these products that have been included in our U.S. GAAP consolidated statements of income. We believe the consolidated T. Rowe Price investment products may impact the reader's ability to understand our core operating results. The following table details the calculation of operating expenses of consolidated T. Rowe Price investment products, net of elimination of its related management and administrative fees.

|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating expenses before eliminations | \$ | 12.7 | \$ | 12.3 | \$ | 13.0 | \$ | - | \$ | - |
| Operating expenses eliminated in consolidation |  | (6.2) |  | (5.6) |  | (6.5) |  | - |  | - |
| Total operating expenses, net of eliminations | \$ | 6.5 | \$ | 6.7 | \$ | 6.5 | \$ | - | \$ | - |

The following table details the calculation of net income of consolidated T. Rowe Price investment products, net of redeemable non-controlling interests:

|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net investment income (loss) | \$ | (92.9) | \$ | 193.9 | \$ | 121.1 | \$ | 1.5 | \$ | - |
| Operating expenses |  | (12.7) |  | (12.3) |  | (13.0) |  | - |  | - |
| Net income (loss) |  | (105.6) |  | 181.6 |  | 108.1 |  | 1.5 |  | - |
| Less: net income attributable to redeemable non-controlling interests |  | (68.8) |  | 83.4 |  | 39.0 |  | - |  | - |
| T. Rowe Price Group's portion of net income (loss) | \$ | (36.8) | \$ | 98.2 | \$ | 69.1 | \$ | 1.5 | \$ | - |

${ }^{(2)}$ This non-GAAP adjustment removes the impact of market movements on the supplemental savings plan liability and related investments designated as economic hedges of the liability beginning July 1, 2017. Amounts deferred under the supplemental savings plan are adjusted for appreciation (depreciation) of hypothetical investments chosen by the employees. Since we economically hedge the exposure to these market movements, we believe it is useful to offset the non-operating investment income earned on the hedges against the related compensation expense to increase comparability period to period. The following table details the supplemental savings plan related items:

|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-operating income (loss) of investments designated as an economic hedge of supplemental savings plan liability | \$ | (6.1) | \$ | 12.3 | \$ | - | \$ | - | \$ | - |
| Compensation expense from market valuation changes in supplemental savings plan liability |  | 5.6 |  | (11.7) |  | - |  | - |  | - |
| Non-operating income (loss) of investments designated as an economic hedge of supplemental savings plan liability less compensation expense | \$ | (.5) | \$ | . 6 | \$ | - | \$ | - | \$ | - |

## Table of Contents

${ }^{(3)}$ This non-GAAP adjustment removes the non-operating income that remains after backing out the portion related to the consolidated T . Rowe Price investment products and the investments designated as an economic hedge of our supplemental savings plan liability. Beginning in the second quarter of 2018, we modified the non-GAAP adjustment to no longer adjust for the investment gains recognized on our cash and discretionary investments as the income earned on these assets are considered part of our core operations. The impact on previously reported non-GAAP measures is immaterial. We believe adjusting for the remaining non-operating income helps the reader's ability to understand our core operating results and increases comparability to prior years. Additionally, we do not emphasize the impact of the portion of non-operating income removed when managing and evaluating our performance.

|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total non-operating income | \$ | 23.2 | \$ | 396.3 | \$ | 227.1 | \$ | 103.5 | \$ | 112.2 |
| Less: net investment gains (losses) of consolidated T. Rowe Price investment products |  | (92.9) |  | 193.9 |  | 121.1 |  | 1.5 |  | - |
| Less: non-operating income (loss) from investments designated as an economic hedge of supplemental savings plan liability |  | (6.1) |  | 12.3 |  | - |  | - |  | - |
| Less: investment gains earned on cash and discretionary investments |  | 28.5 |  | - |  | - |  | - |  | - |
| Total other non-operating income | \$ | 93.7 | \$ | 190.1 | \$ | 106.0 | \$ | 102.0 | \$ | 112.2 |

${ }^{(4)}$ In the second quarter of 2016, we recognized a nonrecurring charge of $\$ 166.2$ million related to our decision to compensate certain clients in regard to the Dell appraisal rights matter. We also recognized an offset to this charge during the fourth quarter of 2016 for related insurance recoveries totaling $\$ 100$ million. In the first quarter of 2017, we recognized additional insurance recoveries of $\$ 50$ million as a reduction in operating expenses from claims that were filed in relation to the matter. During 2018, we recognized an additional reduction in operating expenses of $\$ 15.2$ million upon recovering a portion of the payments we made to our clients in 2016 . We believe it is useful to readers of our consolidated statements of income to adjust for these charges and non-recurring recoveries in arriving at adjusted operating expenses and net income attributable to T. Rowe Price Group and diluted earnings per share.
${ }^{(5)}$ The income tax impacts were calculated in order to achieve an overall year-to-date non-GAAP effective tax rate of $24.1 \%$ for $2018,34.7 \%$ for $2017,36.6 \%$ for $2016,38.9 \%$ for 2015 , and $38.6 \%$ for 2014 . We currently estimate our non-GAAP effective tax rate for the full-year 2019 will be in the range of $24 \%$ to $26 \%$.
${ }^{(6)}$ In the fourth quarter of 2017, we recognized a nonrecurring charge of $\$ 71.1$ million to reflect the effect of the U.S. tax law changes enacted on December 22, 2017. During the second quarter of 2018, we also recognized a nonrecurring charge of $\$ 20.8$ million for an adjustment made to the charge taken in 2017 related to the enactment of U.S. tax reform. We believe it is useful to readers of our consolidated statements of income to adjust for these nonrecurring charges in arriving at net income attributable to T. Rowe Price Group and diluted earnings per share.
${ }^{(7)}$ During the second quarter of 2018, we recognized a nonrecurring charge of $\$ 7.9$ million for the remeasurement of the firm's deferred tax assets and liabilities to reflect the effect of Maryland state tax legislation enacted on April 24, 2018. We believe it is useful to readers of our consolidated statements of income to adjust for this nonrecurring charge in arriving at net income attributable to T . Rowe Price Group and diluted earnings per share.
${ }^{(8)}$ This non-GAAP measure was calculated by applying the two-class method to adjusted net income attributable to T. Rowe Price Group, divided by the weighted-average common shares outstanding assuming dilution.

## CAPITAL RESOURCES AND LIQUIDITY.

During 2018, stockholders' equity increased from $\$ 5.8$ billion to $\$ 6.1$ billion. Tangible book value increased to $\$ 5.5$ billion at December 31, 2018.

## Sources of Liquidity

We remain debt-free with ample liquidity, including cash and investments in $T$. Rowe Price products as follows:

| (in millions) | 12/31/2018 |  | 12/31/2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash and cash equivalents | \$ | 1,425.2 | \$ | 1,902.7 |
| Discretionary investments |  | 1,597.1 |  | 780.3 |
| Total cash and discretionary investments |  | 3,022.3 |  | 2,683.0 |
| Redeemable seed capital investments |  | 1,118.9 |  | 1,188.9 |
| Investments used to hedge the supplemental savings plan liability |  | 381.3 |  | 268.2 |
| Total cash and investments in T. Rowe Price products | \$ | 4,522.5 | \$ | 4,140.1 |

During 2018, we rebalanced our cash and discretionary investments portfolio resulting in the reallocation of some cash invested in T. Rowe Price money market funds to certain T. Rowe Price investment products. Given the availability of our financial resources and cash expected to be generated through future operations, we do not maintain an available external source of additional liquidity.

Our seed capital investments are redeemable, although we generally expect to be invested for several years until unrelated third-party investors substantially reduce our relative ownership percentage. Cash and discretionary investments in T. Rowe Price products held by our subsidiaries outside the U.S. were $\$ 425.3$ million at December 31, 2018, and $\$ 424.5$ million at December 31, 2017.

The cash and investment presentation on the consolidated balance sheet is based on how we account for the cash or investment. The following table details how T. Rowe Price Group's interests in cash and T. Rowe Price investment products relate to where they are presented in the consolidated balance sheet as of December 31, 2018.

| (in millions) | Cash and cash equivalents |  | Investments |  | Net assets of consolidated T. Rowe Price investment products |  | 12/31/2018 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash and discretionary investments | \$ | 1,425.2 | \$ | 1,577.9 | \$ | 19.2 | \$ | 3,022.3 |
| Seed capital investments |  | - |  | 236.7 |  | 882.2 |  | 1,118.9 |
| Investment products used to hedge supplemental savings plan |  | - |  | 381.3 |  | - |  | 381.3 |
| Total cash and investments in T. Rowe Price products attributable to T. Rowe Price Group |  | 1,425.2 |  | 2,195.9 |  | 901.4 |  | 4,522.5 |
| Investment in UTI and other investments |  | - |  | 257.5 |  | - |  | 257.5 |
| Total cash and investments attributable to T. Rowe Price Group |  | 1,425.2 |  | 2,453.4 |  | 901.4 |  | 4,780.0 |
| Redeemable non-controlling interests |  | - |  | - |  | 740.3 |  | 740.3 |
| As reported on unaudited condensed consolidated balance sheet at December 31, 2018 | \$ | 1,425.2 | \$ | 2,453.4 | \$ | 1,641.7 | \$ | 5,520.3 |

Our consolidated balance sheet reflects the cash and cash equivalents, investments, other assets and liabilities of those T. Rowe Price investment products we consolidate, as well as redeemable non-controlling interests for the portion of these T. Rowe Price investment products that are held by unrelated third-party investors. Although we can redeem our net interest in these T. Rowe Price investment products at any time, we cannot directly access or sell the assets held by the products to obtain cash for general operations. Additionally, the assets of these T. Rowe Price investment products are not available to our general creditors. Our interest in these T. Rowe Price investment products was used as initial seed capital and, when it is determined by management that the seed capital is no

## Table of Contents

longer needed, we will recategorize that investment in accordance with our cash and discretionary investment framework so as to not impact the investment product and, ultimately, the unrelated third-party investors.

## Uses of Liquidity

We paid $\$ 2.80$ per share in regular dividends in 2018, an increase of $22.8 \%$ over the $\$ 2.28$ per share paid in 2017. Additionally, we expended $\$ 1,099.6$ million in 2018 to repurchase 10.8 million shares, or $4.4 \%$, of our outstanding common stock at an average price of $\$ 101.48$ per share. These dividends and repurchases were expended using existing cash balances and cash generated from operations. We will generally repurchase our common stock over time to offset the dilution created by our equity-based compensation plans.

Since the end of 2015, we have returned $\$ 4.0$ billion to stockholders through stock repurchases and our regular quarterly dividends, as follows:

| (in millions) | Recurring dividend |  | Stock repurchases |  | Total cash returned to stockholders |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2016 | \$ | 541.2 | \$ | 676.9 | \$ | 1,218.1 |
| 2017 |  | 562.6 |  | 458.1 |  | 1,020.7 |
| 2018 |  | 694.7 |  | 1,099.6 |  | 1,794.3 |
| Total | \$ | 1,798.5 | \$ | 2,234.6 | \$ | 4,033.1 |

We anticipate property and equipment expenditures for the full-year 2019 to be up to $\$ 200$ million, of which about $65 \%$ is planned for technology initiatives. We expect to fund our anticipated capital expenditures with operating cash flows and other available resources.

The following tables summarize the cash flows for 2018, 2017 and 2016, that are attributable to T. Rowe Price Group, our consolidated T. Rowe Price investment products, and the related eliminations required in preparing the statement.


## Table of Contents

|  |  |  |  |
| :--- | :--- | ---: | :--- |


|  |  |  |
| :--- | :--- | :--- | :--- |

## Table of Contents

## Operating activities

Operating activities attributable to T. Rowe Price Group during 2018 provided cash flows of $\$ 2.2$ billion, an increase of $\$ 626.3$ million from the 2017 period. The increase in these operating cash flows was driven by $\$ 641.6$ million of higher net income after adjusting for significant non-cash activity including depreciation expense, stock-based compensation expense and market gains on investments. Adjustments for market gains on investments decreased during 2018 in part due to a change in accounting guidance that we adopted on January 1, 2018. See Note 1 to our consolidated financial statements for more information. The remaining decrease in investment gain activity is due to lower gains as a result of a weaker equity market in 2018 compared with 2017. Additionally, during 2017, we invested $\$ 218.6$ million into certain investment products to establish an economic hedge of our supplemental savings plan liability and invested an additional \$129.5 million in 2018 in order to maintain it. The remaining $\$ 104.4$ million decrease in operating cash flows attributable to T . Rowe Price Group relates to timing differences on the cash settlement of our assets and liabilities, including the settlement of insurance receivables during 2017 related to the Dell appraisal rights matter. The remaining change in reported cash flows from operating activities was attributable to the net change in trading securities held in our consolidated investment products' underlying portfolios.

Operating activities attributable to T. Rowe Price Group during 2017 provided cash flows of $\$ 1.6$ billion, an increase of $\$ 208.1$ million from the 2016 period. The increase was largely attributable to higher net income attributable to T. Rowe Price Group as well as the timing differences of cash flows related to the Dell appraisal rights matter. We paid $\$ 166.2$ million to certain T. Rowe Price clients during 2016 and received insurance recoveries of $\$ 150.0$ million during 2017 relating to this matter. These changes in cash flows were offset by cash outflows in the 2017 period for new investments made into T. Rowe Price investment products held as trading totaling $\$ 218.6$ million in order to economically hedge our supplemental savings plan liability. The net cash provided by operating activities attributable to T. Rowe Price Group was offset in part by the net change in trading securities held in T. Rowe Price consolidated investment products' underlying investment products.

## Investing activities

Net cash used in investing activities that are attributable to T. Rowe Price Group totaled $\$ 945.7$ million in 2018 , an increase of $\$ 911.8$ million compared with 2017. During 2018, we rebalanced our cash and discretionary investments portfolio resulting in the reallocation of cash and cash equivalents of $\$ 1.0$ billion to certain T. Rowe Price funds. Excluding these reallocations, net purchases of other discretionary investment products decreased $\$ 65.3$ million during 2018 compared with 2017 . These changes in investing cash flows during 2018 compared with 2017 were offset by a $\$ 43.1$ million decrease in in seed capital provided, a $\$ 17.6$ million decrease in property and equipment expenditures, and a $\$ 95.8$ million change in other investing activity, primarily relating to the sale of our 10\% interest in Daiwa SB Investments Ltd. during the third quarter. Since we consolidate the seed capital in T. Rowe Price investment products, our seed capital was eliminated in preparing our consolidated statement of cash flows. The remaining change in reported cash flows from investing activities was attributable to a $\$ 40.4$ million decrease in net cash removed from our balance sheet from consolidating and deconsolidating investment products during 2018 compared with the 2017.

Net cash used in investing activities that are attributable to T. Rowe Price Group totaled $\$ 33.9$ million in 2017, an increase of $\$ 185.8$ million from the comparable 2016 period. During 2017 we received net proceeds of $\$ 296.7$ million upon the sale of certain T. Rowe Price investment products, an increase of $\$ 77.9$ million compared with the 2016 period. A portion of the net proceeds received in 2017 were used to fund the newly established economic hedge of our supplemental savings liability mentioned above. This net increase in investing cash flows was offset by $\$ 37.8$ million increase in property and equipment expenditures during 2017 compared with the 2016 period. Additionally, the amount of seed capital investments we provided in 2017 decreased by $\$ 147.4$ million compared with the 2016 period. Since we consolidate these T. Rowe Price investment products, our investment was eliminated in preparing our consolidated statement of cash flow. The cash flow attributable to consolidated T. Rowe Price investment products of $\$ 64.2$ million in 2017 represented the aggregate net cash removed from our balance sheet upon consolidating and deconsolidating products. During the 2016 period, the comparable cash flow activity added $\$ 41.4$ million to our balance sheet.

## Financing activities

Net cash used in financing activities attributable to T. Rowe Price Group were $\$ 1,709.9$ million in 2018 compared with $\$ 820.1$ million in 2017 . The increase was primarily driven by spending $\$ 632.3$ million more in common stock repurchases in 2018 as market volatility provided an opportunity to buy back more shares. Additionally, a nearly $23 \%$ increase in our quarterly dividend per share resulted in paying $\$ 131.2$ million more in dividends in 2018. The decline in our stock price in 2018 led to fewer stock options being exercised and a $\$ 126.3$ million decrease in

## Table of Contents

related cash proceeds compared with the 2017. The remaining change in reported cash flows from financing activities was primarily attributable to a $\$ 811.2$ million decrease in net subscriptions received from redeemable non-controlling interest holders of our consolidated investment products during 2018 compared with the 2017.

Net cash used in financing activities attributable to T. Rowe Price Group totaled $\$ 820.1$ million in 2017 compared with $\$ 1,091.4$ million in 2016. The decrease in cash used in financing activities was related in part to a reduction of $\$ 218.8$ million expended in common stock repurchases as the sharp increase in our stock price led us to repurchase fewer shares in 2017. This decrease in cash flows was offset by a $\$ 74.8$ million increase in proceeds from option exercises, as a greater number of options were exercised due to the sharp increase in our stock price in 2017. The remaining change in reported cash flows from financing activities was primarily attributable to a $\$ 366.6$ million increase in net subscriptions received from redeemable non-controlling interest holders of our consolidated T. Rowe Price investment products during 2017 compared with the 2016 period.

## CONTRACTUAL OBLIGATIONS.

The following table presents a summary of our future obligations under the terms of our supplemental savings plan, existing operating leases, and other contractual cash purchase commitments at December 31, 2018. The information presented does not include operating expenses or capital expenditures that will be committed in the normal course of operations in 2019 and future years. The information also excludes the $\$ 16.1$ million of unrecognized tax benefits discussed in Note 8 to our consolidated financial statements because it is not possible to estimate the time period in which a payment might be made to the tax authorities.

|  | Total |  | 2019 |  | 2020-2021 |  | 2022-2023 |  | Thereafter |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) |  |  |  |  |  |  |  |  |  |  |
| Supplemental savings plan liability ${ }^{(1)}$ | \$ | 380 | \$ | 3 | \$ | 76 | \$ | 59 | \$ | 242 |
| Noncancelable operating leases |  | 168 |  | 32 |  | 50 |  | 33 |  | 53 |
| Other purchase commitments ${ }^{(2)}$ |  | 285 |  | 202 |  | 42 |  | 13 |  | 28 |
| Total | \$ | 833 | \$ | 237 | \$ | 168 | \$ | 105 | \$ | 323 |

${ }^{(1)}$ These obligations represent the amount of future expected funding requirements related to our supplemental savings plan. Payment periods are based on deferral elections made by participants. If no deferral election has been made, the obligation has been included in the "Thereafter" column as the timing of distributions will be determined upon termination of employment. We economically hedge this liability and the related market exposure with investments in certain $T$. Rowe Price products. The carrying value of these investments at December 31, 2018, was $\$ 381.3$ million and are reported within the Investments line on our consolidated balance sheet. Either available cash or these investments can be used to fund the future liability payments.
${ }^{(2)}$ Other purchase commitments include contractual amounts that will be due for the purchase of goods or services to be used in our operations and may be cancelable at earlier times than those indicated, under certain conditions that may involve termination fees. Because these obligations are generally of a normal recurring nature, we expect that we will fund them from future cash flows from operations.

We also have outstanding commitments to fund additional contributions to investment partnerships totaling $\$ 27.3$ million at December 31, 2018. The vast majority of these additional contributions will be made to investment partnerships in which we have an existing investment. In addition to such amounts, a percentage of prior distributions may be called under certain circumstances.

## CRITICAL ACCOUNTING POLICIES.

The preparation of financial statements often requires the selection of specific accounting methods and policies from among several acceptable alternatives. Further, significant estimates and judgments may be required in selecting and applying those methods and policies in the recognition of the assets and liabilities in our consolidated balance sheets, the revenues and expenses in our consolidated statements of income, and the information that is contained in our significant accounting policies and notes to the consolidated financial statements. Making these estimates and judgments requires the analysis of information concerning events that may not yet be complete and of facts and circumstances that may change over time. Accordingly, actual amounts or future results can differ materially from those estimates that we include currently in our consolidated financial statements, significant accounting policies, and notes.

## Table of Contents

We present those significant accounting policies used in the preparation of our consolidated financial statements as an integral part of those statements within this 2018 Annual Report. In the following discussion, we highlight and explain further certain of those policies that are most critical to the preparation and understanding of our financial statements.

## Consolidation

We consolidate all subsidiaries and T . Rowe Price investment products in which we have a controlling interest. We are generally deemed to have a controlling interest when we own the majority of the voting interest of an entity or are deemed to be the primary beneficiary of a variable interest entity ("VIE"). VIEs are entities that lack sufficient equity to finance its activities or the equity holders do not have defined power to direct the activities of the entity normally associated with an equity investment. Our analysis to determine whether an entity is a VIE or a voting interest entity ("VOE") involves judgment and considers several factors, including an entity's legal organization, capital structure, the rights of the equity investment holders, our ownership interest in the entity, and our contractual involvement with the entity. We continually review and reconsider our VIE or VOE conclusions upon the occurrence of certain events, such as changes to our ownership interest, changes to an entity's legal structure, or amendments to governing documents. Our VIEs are primarily T. Rowe Price investment products and our variable interest consists of our equity ownership in and investment management fees earned from these entities.

We are the primary beneficiary if we have the power to direct the activities of the VIE that most significantly impact its economic performance and the obligation to absorb losses of the entity or the right to receive benefits from the VIE that could potentially be significant. Our SICAV funds and other T. Rowe Price investment products regulated outside the U.S. are determined to be VIEs. At December 31, 2018, we consolidated VIEs with net assets of $\$ 1.4$ billion.

## Other-than-temporary impairments of equity method investments

We evaluate our equity method investments, including our investment in UTI and certain investments in T. Rowe Price investment products, for impairment when events or changes in circumstances indicate that the carrying value of the investment exceeds its fair value, and the decline in fair value is other than temporary.

## Goodwill

We internally conduct, manage, and report our operations as one investment advisory business. We do not have distinct operating segments or components that separately constitute a business. Accordingly, we attribute goodwill to a single reportable business segment and reporting unitour investment advisory business.

We evaluate the carrying amount of goodwill in our consolidated balance sheets for possible impairment on an annual basis in the third quarter of each year using a fair value approach. Goodwill would be considered impaired whenever our historical carrying amount exceeds the fair value of our investment advisory business. Our annual testing has demonstrated that the fair value of our investment advisory business (our market capitalization) exceeds our carrying amount (our stockholders' equity) and, therefore, no impairment exists. Should we reach a different conclusion in the future, additional work would be performed to ascertain the amount of the noncash impairment charge to be recognized. We must also perform impairment testing at other times if an event or circumstance occurs indicating that it is more likely than not that an impairment has been incurred. The maximum future impairment of goodwill that we could incur is the amount recognized in our consolidated balance sheets, $\$ 665.7$ million as of December 31, 2018.

## Provision for income taxes

After compensation and related costs, our provision for income taxes on our earnings is our largest annual expense. We operate in numerous states and countries through our various subsidiaries and must allocate our income, expenses, and earnings under the various laws and regulations of each of these taxing jurisdictions. Accordingly, our provision for income taxes represents our total estimate of the liability that we have incurred in doing business each year in all of our locations. Annually, we file tax returns that represent our filing positions with each jurisdiction and settle our return liabilities. Each jurisdiction has the right to audit those returns and may take different positions with respect to income and expense allocations and taxable earnings determinations. From time to time, we may also provide for estimated liabilities associated with uncertain tax return filing positions that are subject to, or in the process of, being audited by various tax authorities. Because the determination of our annual

## Table of Contents

provision is subject to judgments and estimates, it is likely that actual results will vary from those recognized in our financial statements. As a result, we recognize additions to, or reductions of, income tax expense during a reporting period that pertain to prior period provisions as our estimated liabilities are revised and actual tax returns and tax audits are settled. We recognize any such prior period adjustment in the discrete quarterly period in which it is determined.

## NEWLY ISSUED BUT NOT YET ADOPTED ACCOUNTING GUIDANCE.

See Note 1 - Basis of Preparation and Summary of Significant Accounting Policies within Item 8, Financial Statements and Supplementary Data for a discussion of newly issued but not yet adopted accounting guidance.

## FORWARD-LOOKING INFORMATION.

From time to time, information or statements provided by or on behalf of $T$. Rowe Price, including those within this report, may contain certain forward-looking information, including information or anticipated information relating to: our revenues, net income, and earnings per share on common stock; changes in the amount and composition of our assets under management; our expense levels; our tax rate; and our expectations regarding financial markets, future transactions, dividends, stock repurchases, investments, capital expenditures, and other conditions. Readers are cautioned that any forward-looking information provided by or on behalf of T. Rowe Price is not a guarantee of future performance. Actual results may differ materially from those in forward-looking information because of various factors including, but not limited to, those discussed below and in Item 1A, Risk Factors, of this Form 10-K Annual Report. Further, forward-looking statements speak only as of the date on which they are made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which it is made or to reflect the occurrence of unanticipated events.

Our future revenues and results of operations will fluctuate primarily due to changes in the total value and composition of assets under our management. Such changes result from many factors, including, among other things: cash inflows and outflows in the U.S. mutual funds and other investment products, fluctuations in global financial markets that result in appreciation or depreciation of the assets under our management, our introduction of new mutual funds and investment products, and changes in retirement savings trends relative to participant-directed investments and defined contribution plans. The ability to attract and retain investors' assets under our management is dependent on investor sentiment and confidence; the relative investment performance of the Price mutual funds and other managed investment products as compared with competing offerings and market indexes; the ability to maintain our investment management and administrative fees at appropriate levels; competitive conditions in the mutual fund, asset management, and broader financial services sectors; and our level of success in implementing our strategy to expand our business. Our revenues are substantially dependent on fees earned under contracts with the Price funds and could be adversely affected if the independent directors of one or more of the Price funds terminated or significantly altered the terms of the investment management or related administrative services agreements. Non-operating investment income will also fluctuate primarily due to the size of our investments, changes in their market valuations, and any other-than-temporary impairments that may arise or, in the case of our equity method investments, our proportionate share of the investees' net income.

Our future results are also dependent upon the level of our expenses, which are subject to fluctuation for the following or other reasons: changes in the level of our advertising and promotion expenses in response to market conditions, including our efforts to expand our investment advisory business to investors outside the U.S. and to further penetrate our distribution channels within the U.S.; the pace and level of spending to support key strategic priorities; variations in the level of total compensation expense due to, among other things, bonuses, restricted stock units and other equity grants, other incentive awards, changes in our employee count and mix, and competitive factors; any goodwill or other asset impairment that may arise; fluctuation in foreign currency exchange rates applicable to the costs of our international operations; expenses and capital costs, such as technology assets, depreciation, amortization, and research and development, incurred to maintain and enhance our administrative and operating services infrastructure; the timing of the assumption of all third party research payments, unanticipated costs that may be incurred to protect investor accounts and the goodwill of our clients; and disruptions of services, including those provided by third parties, such as fund and product recordkeeping, facilities, communications, power, and the mutual fund transfer agent and accounting systems.

Our business is also subject to substantial governmental regulation, and changes in legal, regulatory, accounting, tax, and compliance requirements may have a substantial effect on our operations and results, including, but not

## Table of Contents

limited to, effects on costs that we incur and effects on investor interest in $T$. Rowe Price investment products and investing in general or in particular classes of mutual funds or other investments.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

## EQUITY PRICE RISK.

The following table presents the equity price risk from our investments in $T$. Rowe Price investment products as they are carried at fair value. Investments in these products generally moderate market risk as they are diversified and invest in a number of different financial instruments. T. Rowe Price manages its cash and discretionary investments exposure to market risk by diversifying its investments among equity and fixed income portfolios as well as many domestic and international products. In addition, investment holdings may be altered from time to time in response to changes in market risks and other factors, as management deems appropriate. Seed capital investments, which are used for new product offerings, experience market volatility as we do not actively manage the market risk for these investments.

In order to quantify the sensitivity of our investments to changes in market valuations, we have chosen to use a variant of each product's net asset value to quantify the equity price risk, as we believe the volatility in each product's net asset value best reflects the underlying risk potential as well as the market trends surrounding each of its investment objectives. The potential future loss of value, before any income tax benefits, of these investments at December 31, 2018 was determined by using the lower of each product's lowest net asset value per share during 2018 or its net asset value per share at December 31, 2018, reduced by 10\%. In considering this presentation, it is important to note that: Not all products experienced their lowest net asset value per share on the same day; it is likely that the composition of the investment portfolio would be changed if adverse market conditions persisted; and we could experience future losses in excess of those presented below.

| (in millions) | Fair value 12/31/2018 |  | Potential lower value |  | Potential loss |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investments in T. Rowe Price products |  |  |  |  |  |  |  |
| Discretionary investments | \$ | 1,399.0 | \$ | 1,259.1 | \$ | 139.9 | 10\% |
| Seed capital not consolidated |  | 139.4 |  | 125.4 |  | 14.0 | 10\% |
| Investments designated as an economic hedge of supplemental savings plan liability |  | 381.3 |  | 343.2 |  | 38.1 | 10\% |
| Total | \$ | 1,919.7 | \$ | 1,727.7 | \$ | 192.0 | 10\% |
| Direct investment in consolidated T. Rowe Price investment products |  |  |  |  |  |  |  |
| Discretionary investments | \$ | 19.2 | \$ | 17.1 | \$ | 2.1 | 11\% |
| Seed capital |  | 882.2 |  | 784.1 |  | 98.1 | 11\% |
| Total | \$ | 901.4 | \$ | 801.2 | \$ | 100.2 | 11\% |
| Investment partnerships and other investments held at fair value | \$ | 99.6 | \$ | 79.8 | \$ | 19.8 | 20\% |

Any losses arising from the change in fair value of investments in T. Rowe Price products would result in a corresponding decrease, net of tax, in our net income attributable to T. Rowe Price Group. The direct investment in consolidated T. Rowe Price investment products represents our portion of the net assets of the product. Upon consolidation of these products, our direct investment is eliminated and the net assets of the products are combined in our consolidated balance sheet, together with redeemable non-controlling interests, which represents the portion of the products that is owned by unrelated third-party investors. Any losses arising from the change in fair value of our direct investments in consolidated T. Rowe Price investment products would also result in a corresponding decrease, net of tax, in our net income attributable to T. Rowe Price Group.

## CURRENCY TRANSLATION RISK.

Certain of our investments, including a few consolidated T. Rowe Price investment products, expose us to currency translation risk when the financial statements are translated into U.S. dollars ("USD"). Our most significant exposure relates to the translation of the financial statements of our equity method investment in UTI (\$152.4 million at December 31, 2018). UTI's financial statements are denominated in Indian rupees ("INR") and are translated to USD each reporting period. We do not use derivative financial instruments to manage this currency risk, so both positive and negative fluctuations in the INR against the USD will affect accumulated other comprehensive income and the carrying amount of our investment. We had a cumulative translation loss, net of tax, of $\$ 48.8$ million at December 31, 2018, related to our investment in UTI. Given the nature of UTI's business, should conditions deteriorate in markets in which they operate, we are at risk for loss up to our carrying amount.

We operate in several countries outside the U.S. of which the United Kingdom is the most prominent. We incur operating expenses and have assets and liabilities denominated in currencies other than USD associated with these operations, although our revenues are predominately realized in USD. We do not believe that foreign currency fluctuations materially affect our results of operations.

## Item 8. Financial Statements and Supplementary Data.

Page
Index to Financial Statements:
Consolidated Balance Sheets at December 31, 2018 and 2017 ..... 50
Consolidated Statements of Income for each of the years in the three-year period ended December 31, 2018 ..... 51
Consolidated Statements of Comprehensive Income for each of the years in the three-year period ended December 31, 2018 ..... 52
Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2018 ..... 53
Consolidated Statements of Stockholders' Equity for each of the years in the three-year period ended December 31, 2018 ..... 54
Notes to Consolidated Financial Statements ..... 56
Report of Independent Registered Public Accounting Firm ..... 78

## CONSOLIDATED BALANCE SHEETS

## (in millions, except share data)

|  | 12/31/2018 |  | 12/31/2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |  |
| Cash and cash equivalents | \$ | 1,425.2 | \$ | 1,902.7 |
| Accounts receivable and accrued revenue |  | 549.6 |  | 565.3 |
| Investments |  | 2,453.4 |  | 1,477.3 |
| Assets of consolidated T. Rowe Price investment products (\$1,392.6 million at December 31, 2018 and $\$ 1,839.6$ million at December 31, 2017, related to variable interest entities) |  | 1,680.4 |  | 2,048.4 |
| Property and equipment, net |  | 661.3 |  | 652.0 |
| Goodwill |  | 665.7 |  | 665.7 |
| Other assets |  | 253.7 |  | 224.0 |
| Total assets | \$ | 7,689.3 | \$ | 7,535.4 |
|  |  |  |  |  |
| LIABILITIES |  |  |  |  |
| Accounts payable and accrued expenses | \$ | 228.5 | \$ | 216.2 |
| Liabilities of consolidated T. Rowe Price investment products (\$22.7 million at December 31, 2018 and $\$ 39.5$ million at December 31, 2017, related to variable interest entities) |  | 38.7 |  | 55.9 |
| Accrued compensation and related costs |  | 123.3 |  | 108.5 |
| Supplemental savings plan liability |  | 380.0 |  | 269.3 |
| Income taxes payable |  | 54.2 |  | 68.3 |
| Total liabilities |  | 824.7 |  | 718.2 |
|  |  |  |  |  |
| Commitments and contingent liabilities |  |  |  |  |
|  |  |  |  |  |
| Redeemable non-controlling interests |  | 740.3 |  | 992.8 |
|  |  |  |  |  |
| STOCKHOLDERS' EQUITY |  |  |  |  |
| Preferred stock, undesignated, \$.20 par value- authorized and unissued 20,000,000 shares |  | - |  | - |
| Common stock, $\$ .20$ par value-authorized 750,000,000; issued 238,069,000 shares at December 31, 2018 and 245,111,000 at December 31, 2017 |  | 47.6 |  | 49.0 |
| Additional capital in excess of par value |  | 654.6 |  | 846.1 |
| Retained earnings |  | 5,464.1 |  | 4,932.9 |
| Accumulated other comprehensive loss |  | (42.0) |  | (3.6) |
| Total permanent stockholders' equity |  | 6,124.3 |  | 5,824.4 |
| Total liabilities, redeemable non-controlling interests and permanent stockholders' equity | \$ | 7,689.3 | \$ | 7,535.4 |

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 50

## CONSOLIDATED STATEMENTS OF INCOME

## (in millions, except per-share amounts)

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues |  |  |  |  |  |  |
| Investment advisory fees | \$ | 4,850.6 | \$ | 4,295.8 | \$ | 3,735.0 |
| Administrative, distribution, and servicing fees |  | 522.0 |  | 559.1 |  | 549.8 |
| Net revenues |  | 5,372.6 |  | 4,854.9 |  | 4,284.8 |
|  |  |  |  |  |  |  |
| Operating expenses |  |  |  |  |  |  |
| Compensation and related costs |  | 1,808.6 |  | 1,664.9 |  | 1,494.0 |
| Distribution and servicing costs |  | 281.2 |  | 262.6 |  | 233.4 |
| Advertising and promotion |  | 99.6 |  | 92.4 |  | 80.2 |
| Product-related costs |  | 157.1 |  | 146.0 |  | 139.7 |
| Technology, occupancy, and facility costs |  | 383.9 |  | 350.5 |  | 319.8 |
| General, administrative, and other |  | 296.0 |  | 279.7 |  | 218.1 |
| Nonrecurring net charge (recoveries) related to Dell appraisal rights matter |  | (15.2) |  | (50.0) |  | 66.2 |
| Total operating expenses |  | 3,011.2 |  | 2,746.1 |  | 2,551.4 |
|  |  |  |  |  |  |  |
| Net operating income |  | 2,361.4 |  | 2,108.8 |  | 1,733.4 |
|  |  |  |  |  |  |  |
| Non-operating income |  |  |  |  |  |  |
| Net gains on investments |  | 119.2 |  | 198.3 |  | 108.0 |
| Net gains (losses) on consolidated investment products |  | (92.9) |  | 193.9 |  | 121.1 |
| Other income (loss) |  | (3.1) |  | 4.1 |  | (2.0) |
| Total non-operating income |  | 23.2 |  | 396.3 |  | 227.1 |
|  |  |  |  |  |  |  |
| Income before income taxes |  | 2,384.6 |  | 2,505.1 |  | 1,960.5 |
| Provision for income taxes |  | 615.9 |  | 923.9 |  | 706.5 |
| Net income |  | 1,768.7 |  | 1,581.2 |  | 1,254.0 |
| Less: net income (loss) attributable to redeemable non-controlling interests |  | (68.8) |  | 83.4 |  | 39.0 |
| Net income attributable to T. Rowe Price Group | \$ | 1,837.5 | \$ | 1,497.8 | \$ | 1,215.0 |
|  |  |  |  |  |  |  |
| Earnings per share on common stock of T. Rowe Price Group |  |  |  |  |  |  |
| Basic | \$ | 7.41 | \$ | 6.07 | \$ | 4.85 |
| Diluted | \$ | 7.27 | \$ | 5.97 | \$ | 4.75 |

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 51

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

## (in millions)

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net income | \$ | 1,768.7 | \$ | 1,581.2 | \$ | 1,254.0 |
| Other comprehensive income (loss) |  |  |  |  |  |  |
| Currency translation adjustments |  |  |  |  |  |  |
| Consolidated T. Rowe Price investment products—variable interest entities |  | (44.7) |  | 66.4 |  | (9.5) |
| Reclassification gains recognized in non-operating investment income upon deconsolidation of certain T. Rowe Price investment products |  | (3.6) |  | (.1) |  | (2.2) |
| Total currency translation adjustments of consolidated T. Rowe Price investment products-variable interest entities |  | (48.3) |  | 66.3 |  | (11.7) |
| Equity method investments |  | (15.2) |  | 2.6 |  | (1.6) |
| Total currency translation adjustments |  | (63.5) |  | 68.9 |  | (13.3) |
| Net unrealized holding gains (losses) on available-for-sale investments |  | - |  | 37.4 |  | (1.0) |
| Reclassification of (gains) losses in accumulated other comprehensive income to non-operating investment income: |  |  |  |  |  |  |
| Capital gain distributions |  | - |  | (3.5) |  | (6.0) |
| Net gains realized on dispositions determined using average cost |  | - |  | (83.1) |  | (53.0) |
| Net unrealized gains recognized upon the transfer to trading investments |  | - |  | (23.6) |  | - |
| Total reclassification adjustments |  | - |  | (110.2) |  | (59.0) |
| Total net unrealized holding losses recognized in other comprehensive income |  | - |  | (72.8) |  | (60.0) |
|  |  |  |  |  |  |  |
| Other comprehensive loss before income taxes |  | (63.5) |  | (3.9) |  | (73.3) |
| Net deferred tax benefits |  | 9.2 |  | 10.0 |  | 28.2 |
| Total other comprehensive income (loss) |  | (54.3) |  | 6.1 |  | (45.1) |
| Total comprehensive income |  | 1,714.4 |  | 1,587.3 |  | 1,208.9 |
| Less: comprehensive income (loss) attributable to redeemable non-controlling interests |  | (94.9) |  | 104.6 |  | 36.5 |
| Comprehensive income attributable to T. Rowe Price Group | \$ | 1,809.3 | \$ | 1,482.7 | \$ | 1,172.4 |

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 52

CONSOLIDATED STATEMENTS OF CASH FLOWS

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash flows from operating activities |  |  |  |  |  |  |
| Net income | \$ | 1,768.7 | \$ | 1,581.2 | \$ | 1,254.0 |
| Adjustments to reconcile net income to net cash provided by operating activities |  |  |  |  |  |  |
| Depreciation and amortization of property and equipment |  | 159.5 |  | 143.6 |  | 133.4 |
| Stock-based compensation expense |  | 197.1 |  | 152.0 |  | 161.6 |
| Realized gains on dispositions of available-for-sale T. Rowe Price investment products |  | - |  | (83.1) |  | (53.0) |
| Gains recognized upon transfer of an investment in a T. Rowe Price mutual fund from available-for-sale to held as trading |  | - |  | (23.6) |  | - |
| Net gains recognized on other investments |  | (50.5) |  | (49.7) |  | (31.0) |
| Net investments in T. Rowe Price investment products to economically hedge supplemental savings plan liability |  | (129.5) |  | (218.6) |  | - |
| Net change in trading securities held by consolidated T. Rowe Price investment products |  | (437.0) |  | $(1,492.9)$ |  | $(1,297.9)$ |
| Changes in accounts receivable and accrued revenue |  | 12.7 |  | (101.6) |  | (10.5) |
| Changes in payables and accrued liabilities |  | 111.3 |  | 323.4 |  | 139.2 |
| Other changes in assets and liabilities |  | (12.4) |  | (1.2) |  | (125.3) |
| Net cash provided by operating activities |  | 1,619.9 |  | 229.5 |  | 170.5 |
|  |  |  |  |  |  |  |
| Cash flows from investing activities |  |  |  |  |  |  |
| Purchases of T. Rowe Price investment products |  | $(1,124.0)$ |  | (39.9) |  | (.3) |
| Dispositions T. Rowe Price investment products |  | 352.4 |  | 336.6 |  | 219.1 |
| Net cash of T. Rowe Price investment products on consolidation (deconsolidation) |  | (23.8) |  | (64.2) |  | 41.4 |
| Additions to property and equipment |  | (168.5) |  | (186.1) |  | (148.3) |
| Other investing activity |  | 88.4 |  | (7.4) |  | (5.7) |
| Net cash provided by (used in) investing activities |  | (875.5) |  | 39.0 |  | 106.2 |
| Cash flows from financing activities |  |  |  |  |  |  |
| Repurchases of common stock |  | $(1,090.4)$ |  | (458.1) |  | (676.9) |
| Common share issuances under stock-based compensation plans |  | 74.8 |  | 201.1 |  | 126.3 |
| Dividends paid to common stock and equity-award holders |  | (694.3) |  | (563.1) |  | (540.8) |
| Net subscriptions received from redeemable non-controlling interest holders |  | 470.4 |  | 1,281.6 |  | 915.0 |
| Net cash provided by (used in) provided by financing activities |  | (1,239.5) |  | 461.5 |  | (176.4) |
| Effect of exchange rate changes on cash and cash equivalents of consolidated T . Rowe Price investment products |  | (15.4) |  | 5.3 |  | (2.1) |
| Net change in cash and cash equivalents during period |  | (510.5) |  | 735.3 |  | 98.2 |
| Cash and cash equivalents at beginning of period, including $\$ 103.1$ million at December 31, 2017 and $\$ 65.6$ million at December 31, 2016 held by consolidated $T$. Rowe Price investment products |  | 2,005.8 |  | 1,270.5 |  | 1,172.3 |
| Cash and cash equivalents at end of period, including $\$ 70.1$ million at December 31, 2018, $\$ 103.1$ million at December 31, 2017, and $\$ 65.6$ million at December 31, 2016, held by consolidated T. Rowe Price investment products | \$ | 1,495.3 | \$ | 2,005.8 | \$ | 1,270.5 |

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 53

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

## (shares in thousands; dollars in millions)

|  | Common shares outstanding | Commonstock |  | Additional capital in excess of par value |  | Retained earnings |  | AOCI(1) |  | Total stockholders' equity |  | Redeemable noncontrolling interests |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balances at December 31, 2015 | 250,469 | \$ | 50.1 | \$ | 654.6 | \$ | 3,970.7 | \$ | 86.6 | \$ | 4,762.0 | \$ | - |
| Reclassification of T. Rowe Price investment products upon adoption of new accounting guidance on January 1, 2016 | - |  | - |  | - |  | 32.5 |  | (32.5) |  | - |  | 672.7 |
| Cumulative effect adjustment upon adoption of new stock-based compensation guidance on January 1, 2016 | - |  | - |  | 12.9 |  | (9.0) |  | - |  | 3.9 |  |  |
| Balances at January 1, 2016 | 250,469 |  | 50.1 |  | 667.5 |  | 3,994.2 |  | 54.1 |  | 4,765.9 |  | 672.7 |
| Net income | - |  | - |  | - |  | 1,215.0 |  | - |  | 1,215.0 |  | 39.0 |
| Other comprehensive income (loss), net of tax | - |  | - |  | - |  | - |  | (42.6) |  | (42.6) |  | (2.5) |
| Dividends declared (\$2.16 per share) | - |  | - |  | - |  | (541.2) |  | - |  | (541.2) |  | - |
| Common stock-based compensation plans activity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shares issued upon option exercises | 4,140 |  | . 8 |  | 148.7 |  | - |  | - |  | 149.5 |  | - |
| Restricted shares issued, net of shares withheld for taxes | (178) |  | - |  | (14.0) |  | - |  | - |  | (14.0) |  | - |
| Shares issued upon vesting of restricted stock units, net of shares withheld for taxes | 409 |  | . 1 |  | (8.8) |  | - |  | - |  | (8.7) |  | - |
| Forfeiture of restricted awards | (61) |  | - |  | - |  | - |  | - |  | - |  | - |
| Stock-based compensation expense | - |  | - |  | 161.6 |  | - |  | - |  | 161.6 |  | - |
| Restricted stock units issued as dividend equivalents | - |  | - |  | . 1 |  | (.1) |  | - |  | - |  | - |
| Common shares repurchased | $(9,995)$ |  | (2.0) |  | (300.6) |  | (374.3) |  | - |  | (676.9) |  | - |
| Net subscriptions into T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | 945.3 |
| Net deconsolidations of T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | (967.3) |
| Balances at December 31, 2016 | 244,784 |  | 49.0 |  | 654.5 |  | 4,293.6 |  | 11.5 |  | 5,008.6 |  | 687.2 |
| Net income | - |  | - |  | - |  | 1,497.8 |  | - |  | 1,497.8 |  | 83.4 |
| Other comprehensive income (loss), net of tax | - |  | - |  | - |  | - |  | (15.1) |  | (15.1) |  | 21.2 |
| Dividends declared (\$2.28 per share) | - |  | - |  | - |  | (562.6) |  | - |  | (562.6) |  | - |
| Common stock-based compensation plans activity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shares issued upon option exercises | 6,339 |  | 1.2 |  | 251.0 |  | - |  | - |  | 252.2 |  | - |
| Restricted shares issued, net of shares withheld for taxes | (170) |  | - |  | (19.2) |  | - |  | - |  | (19.2) |  | - |
| Shares issued upon vesting of restricted stock units, net of shares withheld for taxes | 789 |  | . 1 |  | (31.3) |  | - |  | - |  | (31.2) |  | - |
| Forfeiture of restricted awards | (19) |  | - |  | - |  | - |  | - |  | - |  | - |
| Stock-based compensation expense | - |  | - |  | 152.0 |  | - |  | - |  | 152.0 |  | - |
| Restricted stock units issued as dividend equivalents | - |  | - |  | . 2 |  | (.2) |  | - |  | - |  | - |
| Common shares repurchased | $(6,612)$ |  | (1.3) |  | (161.1) |  | (295.7) |  | - |  | (458.1) |  | - |
| Net subscriptions into T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | 1,243.7 |
| Net deconsolidations of T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | 1,042.7) |
| Balances at December 31, 2017 | 245,111 | \$ | 49.0 | \$ | 846.1 | \$ | 4,932.9 | \$ | (3.6) | \$ | 5,824.4 | \$ | 992.8 |

${ }^{(1)}$ Accumulated other comprehensive income

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 54

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

## (shares in thousands; dollars in millions)

|  | Common shares outstanding | Common stock |  | Additional capital in excess of par value |  |  | Retained earnings | AOCl(1) |  | Total stockholders' equity |  | Redeemable noncontrolling interests |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balances at December 31, 2017 | 245,111 | \$ | 49.0 | \$ | 846.1 | \$ | 4,932.9 | \$ | (3.6) | \$ | 5,824.4 | \$ | 992.8 |
| Cumulative effect adjustment upon adoption of new financial instruments and accumulated other comprehensive income guidance on January 1 , $2018^{(2)}$ | - |  | - |  | - |  | 22.4 |  | (7.9) |  | 14.5 |  | - |
| Reclassification adjustment of stranded tax benefits on currency translation adjustments upon adoption of new accumulated other comprehensive income guidance on January 1, 2018 | - |  | - |  | - |  | 2.3 |  | (2.3) |  | - |  | - |
| Balances at January 1, 2018 | 245,111 |  | 49.0 |  | 846.1 |  | 4,957.6 |  | (13.8) |  | 5,838.9 |  | 992.8 |
| Net income | - |  | - |  | - |  | 1,837.5 |  | - |  | 1,837.5 |  | (68.8) |
| Other comprehensive income (loss), net of tax | - |  | - |  | - |  | - |  | (28.2) |  | (28.2) |  | (26.1) |
| Dividends declared (\$2.80 per share) | - |  | - |  | - |  | (694.7) |  | - |  | (694.7) |  | - |
| Common stock-based compensation plans activity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shares issued upon option exercises | 2,870 |  | . 5 |  | 120.8 |  | - |  | - |  | 121.3 |  | - |
| Restricted shares withheld for taxes, net of shares issued | (115) |  | - |  | (11.4) |  | - |  | - |  | (11.4) |  | - |
| Shares issued upon vesting of restricted stock units, net of shares withheld for taxes | 1,053 |  | . 2 |  | (36.8) |  | - |  | - |  | (36.6) |  | - |
| Forfeiture of restricted awards | (14) |  | - |  | - |  | - |  | - |  | - |  | - |
| Stock-based compensation expense | - |  | - |  | 197.1 |  | - |  | - |  | 197.1 |  | - |
| Restricted stock units issued as dividend equivalents | - |  | - |  | . 2 |  | (.2) |  | - |  | - |  | - |
| Common shares repurchased | $(10,836)$ |  | (2.1) |  | (461.4) |  | (636.1) |  | - |  | $(1,099.6)$ |  | - |
| Net subscriptions into T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | 468.8 |
| Net deconsolidations of T. Rowe Price investment products | - |  | - |  | - |  | - |  | - |  | - |  | (626.4) |
| Balances at December 31, 2018 | 238,069 | \$ | 47.6 | \$ | 654.6 | \$ | 5,464.1 | \$ | (42.0) | \$ | 6,124.3 | \$ | 740.3 |

${ }^{(1)}$ Accumulated other comprehensive income
${ }^{(2)}$ Includes the reclassification of $\$ 1.7$ million of stranded income taxes on available-for-sale investments resulting from U.S. tax law changes enacted on December 22, 2017, from accumulated other comprehensive income to retained earnings.

The accompanying notes to consolidated financial statements are an integral part of these statements.
Page 55

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 1 - BASIS OF PREPARATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES.

T. Rowe Price Group, Inc. derives its consolidated revenues and net income primarily from investment advisory services that its subsidiaries provide to individual and institutional investors in the T. Rowe Price U.S. mutual funds ("U.S. mutual funds") separately managed accounts, subadvised funds, and other T. Rowe Price products. We also provide certain investment advisory clients with related administrative services, including distribution, mutual fund transfer agent, accounting and shareholder services; participant recordkeeping and transfer agent services for defined contribution retirement plans; brokerage, and trust services.

Investment advisory revenues depend largely on the total value and composition of assets under our management. Accordingly, fluctuations in financial markets and in the composition of assets under management impact our revenues and results of operations.

## BASIS OF PREPARATION.

These consolidated financial statements have been prepared by management in accordance with accounting principles generally accepted in the United States. These principles require that we make certain estimates and assumptions. Actual results may vary from our estimates.

In order to increase transparency of operating expenses and better align expenses that have similar cost drivers, we have changed, as of January 1, 2018, the presentation of certain line items of our income statement. In doing so, we have reclassified certain prior year amounts to conform to the 2018 presentation. These reclassifications are shown along with the impact of the new revenue recognition accounting standard adopted on January 1, 2018, in the New Accounting Guidance section below.

## NEW ACCOUNTING GUIDANCE.

We adopted Accounting Standards Codification Topic 606: Revenue from Contracts with Customers ("ASC 606"), on January 1, 2018, using the retrospective method, which required adjustments to be reflected as of January 1, 2016. In connection with the adoption of this guidance, we reevaluated all of our revenue contracts and determined that the new guidance does not change the timing of when we recognize revenue. However, we did conclude that certain fees earned from the U.S. mutual funds associated with our mutual fund transfer agent, accounting, shareholder servicing, and participant recordkeeping activities could no longer be reported net of the expenses paid to third parties that perform such services, as we are deemed, under the guidance, to have control over the services before they are transferred to the U.S. mutual funds. No transition-related practical expedients were applied. Certain immaterial balance sheet reclassifications were made to conform to the 2018 presentation and all related note disclosures have been recast. Updates to our revenue recognition disclosures are included in Note 3 - Information about Receivables, Revenues, and Services and our updated revenue recognition accounting policy is included in the Summary of Significant Accounting Policies section below.

## Table of Contents

The impact of ASC 606 and other income statement reclassifications, as previously described, on consolidated statements of income for 2017 and 2016 follows:

| (in millions) | 2017 |  |  |  |  |  |  |  | 2016 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | As previously reported |  | Change in Presentation |  | Impact of ASC 606 |  | Recast |  | As previously reported |  | Change in Presentation |  | Impact of ASC 606 |  | Recast |  |
| Revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment advisory fees | \$ | 4,287.7 | \$ | - | \$ | 8.1 | \$ | 4,295.8 | \$ | 3,728.7 | \$ | - | \$ | 6.3 | \$ | 3,735.0 |
| Administrative, distribution, and servicing fees ${ }^{(1)}$ |  | 505.3 |  | - |  | 53.8 |  | 559.1 |  | 494.2 |  | - |  | 55.6 |  | 549.8 |
| Net revenues |  | 4,793.0 |  | - |  | 61.9 |  | 4,854.9 |  | 4,222.9 |  | - |  | 61.9 |  | 4,284.8 |
| Operating expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation and related costs |  | 1,664.9 |  | - |  | - |  | 1,664.9 |  | 1,494.0 |  | - |  | - |  | 1,494.0 |
| Distribution and servicing costs |  | 147.0 |  | 107.4 |  | 8.2 |  | 262.6 |  | 141.7 |  | 85.4 |  | 6.3 |  | 233.4 |
| Advertising and promotion |  | 92.0 |  | - |  | . 4 |  | 92.4 |  | 79.9 |  | - |  | . 3 |  | 80.2 |
| Product-related costs |  | - |  | 93.2 |  | 52.8 |  | 146.0 |  | - |  | 84.8 |  | 54.9 |  | 139.7 |
| Technology, occupancy, and facility costs ${ }^{(2)}$ |  | 338.5 |  | 12.0 |  | - |  | 350.5 |  | 306.2 |  | 13.7 |  | (.1) |  | 319.8 |
| General, administrative, and other |  | 491.8 |  | (212.6) |  | . 5 |  | 279.7 |  | 401.5 |  | (183.9) |  | . 5 |  | 218.1 |
| Nonrecurring net charge (recoveries) related to Dell appraisal rights matter |  | (50.0) |  | - |  | - |  | (50.0) |  | 66.2 |  | - |  | - |  | 66.2 |
| Total operating expenses |  | 2,684.2 |  | - |  | 61.9 |  | 2,746.1 |  | 2,489.5 |  | - |  | 61.9 |  | 2,551.4 |
| Net operating income | \$ | 2,108.8 | \$ | - | \$ | - | \$ | 2,108.8 | \$ | 1,733.4 | \$ | - | \$ | - | \$ | 1,733.4 |

${ }^{(1)}$ The "As previously reported" column aggregates the administrative fees and distribution and servicing fees lines presented in the income statement in prior years.
${ }^{(2)}$ The "As previously reported" column aggregates the depreciation and amortization of property and equipment and occupancy and facility costs lines presented in the income statement in prior years.

We adopted Accounting Standards Update No. 2016-01 - Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities on January 1, 2018. This update addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. After January 1, 2018, the guidance requires substantially all equity investments in non-consolidated entities to be measured at fair value with changes recognized in earnings, except for those accounted for using the equity method of accounting. As such, the guidance eliminated the available-for-sale investment category for equity securities. Prior to this guidance, unrealized holding gains for available-for-sale equity securities were recognized in accumulated other comprehensive income. Upon adoption, we reclassified a net unrealized holding gain of $\$ 7.9$ million, net of taxes, related to our $\$ 597.1$ million available-for-sale investment portfolio from accumulated other comprehensive income to retained earnings. Additionally, certain investments that do not have readily available market prices or quotations will be measured at fair value, under the new guidance, as we elected to use their calculated and reported net asset value ("NAV") per share as a practical expedient for measuring fair value. As such, we recognized a cumulative adjustment to retained earnings of $\$ 14.5$ million to adjust investments previously accounted for as cost method investments to fair value on January 1, 2018. The corresponding increase in the investments' carrying value and related deferred taxes was $\$ 19.5$ million and $\$ 5.0$ million, respectively. Our updated investments policy is included in the Summary of Significant Accounting Policies section below.

We adopted Accounting Standards Update No. 2018-02 - Reclassification of certain tax effects from accumulated other comprehensive income on January 1, 2018. This guidance permits tax effects stranded in accumulated other comprehensive income resulting primarily from the enactment of the U.S. tax reform bill, originally known as the Tax Cuts and Jobs Act of 2017, to be reclassified to retained earnings either on January 1, 2018, or retrospectively. We elected to adopt the guidance on January 1, 2018, and reclassified $\$ 2.3$ million of stranded tax benefits related to currency translation adjustments to retained earnings. The stranded income taxes related to our available-for-sale investment portfolio at December 31, 2017, were reclassified to retained earnings with the adoption of the new

## Table of Contents

financial instruments guidance on January 1, 2018 as discussed above. Our updated comprehensive income policy is included in the Summary of Significant Accounting Policies section below.

## NEWLY ISSUED BUT NOT YET ADOPTED ACCOUNTING GUIDANCE.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 - Leases (Topic 842). The update seeks to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The standards update is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We will adopt this standard on January 1, 2019, using a modified retrospective approach without restating prior comparative periods. We will also adopt certain available practical expedients that will alleviate complexities related to the implementation. We currently expect to record a right-of-use asset of approximately $\$ 140$ million, which includes the lease liability amount less any deferred rent liabilities, and a lease liability of approximately $\$ 170$ million related to our operating leases, primarily our real-estate leases. The adoption will not have a material impact on our results of operations.

In August 2018, the FASB issued Accounting Standards Update No. 2018-15 - Intangibles—Goodwill and Other- Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. This update provides additional guidance on the accounting for costs of implementation activities performed in a cloud computing arrangement that is a service contract. The amendments in this update are effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the impact this standard will have on our financial position and results of operations.

We have considered all other newly issued accounting guidance that is applicable to our operations and the preparation of our consolidated statements, including those we have not yet adopted. We do not believe that any such guidance has or will have a material effect on our financial position or results of operations.

## U.S. TAX REFORM AND NEWLY ENACTED MARYLAND TAX LEGISLATION.

On December 22, 2017, a comprehensive U.S. tax reform bill known as the Tax Cuts and Jobs Act ("Tax Reform") was enacted. Tax Reform included numerous changes to existing tax laws, including a permanent reduction in the federal corporate income tax rate. For the year ended December 31, 2018, the income tax provision includes an additional nonrecurring charge of $\$ 20.8$ million related to the enactment of U.S. tax reform as we further adjusted our deferred tax asset and liability estimates that were initially recorded at December 31, 2017. As of December 31, 2018, we have completed our accounting for the impacts of U.S. tax reform.

On April 24, 2018, the state of Maryland enacted new state tax legislation. This new state tax legislation, effective in 2018, adopted a five-year phase-in of the single sales factor method of apportionment for calculating income tax for multi-state companies doing business in Maryland and is expected to result in a net benefit over time. Accordingly, we recognized a nonrecurring charge of $\$ 7.9$ million during 2018 for the re-measurement of our deferred tax assets and liabilities to reflect the effect of this Maryland state tax legislation.

## SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES.

## Consolidation

Our consolidated financial statements include the accounts of all subsidiaries and T. Rowe Price investment products in which we have a controlling interest. We are deemed to have a controlling interest when we own the majority of a voting interest entity ("VOE") or are deemed to be the primary beneficiary of a variable interest entity ("VIE"). We perform an analysis of our investments to determine if the investment entity is a VOE or VIE. Our analysis involves judgment and considers several factors, including an entity's legal organization, capital structure, the rights of the equity investment holders, our ownership interest in the entity, and our contractual involvement with the entity. We continually review and reconsider our VOE or VIE conclusions upon the occurrence of certain events, such as changes to our ownership interest, changes to an entity's legal structure, or amendments to governing documents. All material accounts and transactions between consolidated entities are eliminated in consolidation.

## Table of Contents

## Variable interest entities

VIEs are entities that, by design: (i) lack sufficient equity to permit the entity to finance its activities independently or (ii) have equity holders that do not have the power to direct the activities of the entity that most significantly impact the entity's economic performance, the obligation to absorb the entity's losses, or the rights to receive the entity's residual returns. We consolidate a VIE when we are the primary beneficiary, which is the party that has both (i) the power to direct the activities of the VIE that most significantly impact its economic performance and (ii) the obligation to absorb losses of the entity or the right to receive benefits from the VIE that could potentially be significant. Our Luxembourg-based SICAV funds and other T. Rowe Price investment products regulated outside the U.S. were determined to be VIEs.

Along with VIEs that we consolidate, we also hold variable interests in other VIEs, including several investment partnerships that are not consolidated because we are not the primary beneficiary.

## Redeemable non-controlling interests

We recognize redeemable non-controlling interests for the portion of the net assets of our consolidated T. Rowe Price investment products held by unrelated third-party investors as their interest is convertible to cash and other assets at their option. As such, we reflect redeemable noncontrolling interests as temporary equity in our consolidated balance sheets.

Investments in T. Rowe Price money market mutual funds
We do not consider our investments in T. Rowe Price money market mutual funds when performing our consolidation analysis as the guidance provides a scope exception for interests in entities that are required to comply with, or operate in accordance with, requirements similar to those in Rule 2a-7 of the Investment Company Act of 1940 for registered money market funds.

## Cash equivalents

Cash equivalents consist primarily of short-term, highly liquid investments in $T$. Rowe Price money market mutual funds. The cost of these funds is equivalent to fair value.

## Investments

## Investments held at fair value

Investments in T. Rowe Price investment products have been made for both general corporate investment purposes and to provide seed capital for newly formed products. Those investments that we do not consolidate are carried at fair value using the quoted closing NAV per share of each fund as of the balance sheet date. The underlying investments held by our consolidated T. Rowe Price investment products retain investment company specialized accounting in consolidation, are considered securities held in a trading account for cash flow reporting purposes and are valued in accordance with the valuation and pricing policy used to value our assets under management which is further described in the Revenue Recognition policy below.

We elected to value our interest in investment partnerships, for which market prices or quotations are not readily available, at fair value using the NAV per share as a practical expedient for measuring fair value.

Changes in the fair values of all these investments are reflected in non-operating income in our consolidated statements of income.

## Equity method investments

Equity method investments consist of investments in entities, including T. Rowe Price investment products, for which we have the ability to exercise significant influence over the operating and financial policies of the investee. The carrying values of these investments are adjusted to reflect our proportionate share of the investee's net income or loss, any unrealized gain or loss resulting from the translation of foreigndenominated financial statements into U.S. dollars, and dividends received. Our proportionate share of income or loss is included in non-operating income in our consolidated statements of income. As permitted under existing accounting guidance, we adopted a policy by which we recognize our share of UTI Asset Management Company Limited's ("UTI") earnings on a quarter lag as current financial information is not available in a timely manner. The basis difference between our carrying value and our proportionate share of UTI's book value is primarily related to consideration paid in excess of the stepped-up basis of assets and liabilities on the date of purchase.

## Concentration of risk

Concentration of credit risk in accounts receivable is believed to be minimal in that our clients generally have substantial assets, including those in the investment portfolios that we manage for them.

Our investments held at fair value expose us to market risk, that is, the potential future loss of value that would result from a decline in the fair value of each investment or its underlying net assets. The underlying holdings of our assets under management are also subject to market risk, which may arise from changes in equity prices, credit ratings, foreign currency exchange rates, and interest rates.

## Property and equipment

Property and equipment is stated at cost net of accumulated depreciation and amortization computed using the straight-line method. Provisions for depreciation and amortization are based on the following weighted-average estimated useful lives: computer and communications software and equipment, 3 years; buildings and improvements, 32 years; leasehold improvements, 8 years; furniture and other equipment, 6 years; and leased land, 99 years.

## Goodwill

We evaluate the carrying amount of goodwill in our consolidated balance sheets for possible impairment on an annual basis in the third quarter of each year using a fair value approach. Our evaluations have indicated that no impairment exists.

We internally conduct, manage, and report our operations as one investment advisory business. We do not have distinct operating segments or components that separately constitute a business. Accordingly, we attribute goodwill to a single reportable business segment and reporting unitour investment advisory business.

## Revenue recognition

Our revenue is earned from investment advisory, administrative, and distribution services we provide to our clients. Each distinct service we promise in our agreements is considered a performance obligation and is the basis for determining when we recognize revenue. The fees are allocated to each distinct performance obligation and we recognize revenue when, or as, we satisfy our promises. The consideration for our services is generally variable and included in net revenues, when it is improbable that a significant reversal could occur in the future. For certain client agreements, we have the discretion to hire a third party to provide services to our clients. In these circumstances, we are generally deemed to control the services before transferring them to our clients, and accordingly present the revenues gross of the related third-party costs. The timing of when we bill our clients and related payment terms vary in accordance with agreed-upon contractual terms. For the majority of our agreements, billing occurs after we have recognized revenue, which results in accounts receivable and accrued revenue. For an insignificant portion of our contracts, billing occurs in advance of providing services, which results in deferred revenue within the accounts payable and accrued expenses line of our consolidated balance sheets.

Taxes billed to our clients based on our fees for services rendered are not included in revenues.

## Investment advisory fees

The majority of our investment advisory agreements, including those with the U.S. mutual funds, have a single performance obligation as the promised services are not separately identifiable from other promises in the agreements and, therefore, are not distinct. Substantially all performance obligations for providing advisory services are satisfied over time and revenue is recognized as time passes.

Investment advisory agreements with T. Rowe Price investment products regulated outside the U.S. generally have two performance obligations; one for investment management and one for distribution. For these agreements, we allocate the management fee to each performance obligation using our best estimate of the standalone fee of each of these services. The performance obligation for providing investment management services, like our other advisory contracts, is satisfied over time and revenue is recognized as time passes. The performance obligation for distribution is satisfied at the point in time when an investor makes an investment into the product. Accordingly, a portion of the investment advisory fees earned from these products relate to distribution performance obligations

## Table of Contents

that were satisfied during prior periods. These distribution fees are reported within the investment advisory fees line of our consolidated statements of income.

The management fee for our investment advisory agreements are based on our assets under management, which change based on fluctuations in financial markets and net cash flows from investors, and represents variable consideration. Therefore, investment advisory fees are generally constrained, and excluded from revenue, until the asset values on which our client is billed are no longer subject to financial market volatility. Investment advisory fees for investment products are presented net of fees waived pursuant to the contractual expense limitations of the product. Our assets under management are valued in accordance with valuation and pricing processes for each major type of investment. Fair values used in our processes are primarily determined from quoted market prices; prices furnished by dealers who make markets in such securities; or from data provided by an independent pricing service that considers yield or price of investments of comparable quality, coupon, maturity, and type. Investments for which market prices are not readily available are not a material portion of our total assets under management.

We provide all services to the U.S. mutual funds under contracts that are subject to periodic review and approval by the funds' Boards. Regulations require that the funds' shareholders also approve material changes to investment advisory contracts.

## Administrative, distribution, and servicing fees

Administrative fees
The administrative services we provide include distribution, mutual fund transfer agent, accounting and shareholder services; participant recordkeeping and transfer agent services for defined contribution retirement plans; brokerage, and trust services.

The administrative service agreements with the U.S. mutual funds for accounting oversight, transfer agency, and recordkeeping services generally have one performance obligation as the promised services in each agreement are not separately identifiable from other promises in the agreement and, therefore, are not distinct. The fees for performing these services are generally equal to the costs incurred and represent variable consideration. The fees are generally constrained and are recognized as revenue when costs are incurred to perform the services. These fees are generally offset by the costs incurred to provide such services.

Other administrative service agreements for participant recordkeeping and transfer agent services for defined contribution retirement plans; brokerage services, and trust services generally have one performance obligation as the promised services in each agreement are not separately identifiable from other performance obligations in the contract and, therefore, are not distinct. Our performance obligation in each agreement is satisfied over time and revenue is recognized as time passes. The fees for these services vary by contract and are both fixed and variable.

## Distribution and servicing fees

The agreements for distribution and servicing fees earned from 12b-1 plans of the Advisor Class, R Class, and Variable Annuity II Class shares of the U.S. mutual funds have one performance obligation, as distribution services are not separately identifiable from shareholder servicing promises in the agreements and, therefore, are not distinct. Our performance obligation is satisfied at the point in time when an investor makes an investment into these share classes of the U.S. mutual funds. The fees for these distribution and servicing agreements are based on the assets under management in these shares classes, which change based on fluctuations in financial markets, and represent variable consideration. These fees are generally constrained, and excluded from revenue, until the asset values on which our client is billed are not subject to financial market volatility. Accordingly, the majority of the distribution and servicing revenue disclosed in Note 3 -Information about Receivables, Revenues and Services relates to distribution and servicing obligations that were satisfied during prior periods. These fees are offset entirely by the distribution and servicing costs paid to third-party financial intermediaries that source the assets of these share classes.

## Advertising

Costs of advertising are expensed the first time that the advertising takes place.

## Table of Contents

## Stock-based compensation

We maintain three stockholder-approved employee long-term incentive plans (2012 Long-Term Incentive Plan, 2004 Stock Incentive Plan, and 2001 Stock Incentive Plan, collectively the LTI Plans) and two stockholder-approved non-employee director plans ( 2017 Non-Employee Director Equity Plan and 2007 Non-Employee Director Equity Plan, collectively the Director Plans). We believe that our stock-based compensation programs align the interests of our employees and directors with those of our common stockholders. As of December 31, 2018, a total of 20,024,786 shares were available for future grant under the 2012 Long-Term Incentive Plan and the 2017 Non-Employee Director Equity Plan (2017 Plan).

Under our LTI Plans, we have issued restricted shares and restricted stock units to employees that settle in shares of our common stock after vesting. Vesting of these awards is based on the individual continuing to render service over an average 5.0 year graded schedule. All restricted shareholders and restricted stock unitholders receive non-forfeitable cash dividends and cash dividend equivalents, respectively, on our dividend payable date. We are also authorized to grant qualified incentive and nonqualified fixed stock options with a maximum term of 10 years. We have not granted options to employees since 2015.

We grant performance-based restricted stock units to certain executive officers in which the number of restricted stock units ultimately retained is determined based on achievement of certain performance thresholds. The number of restricted stock units retained is also subject to similar timebased vesting requirements as the other restricted stock units described above. Cash dividend equivalents are accrued and paid to the holders of performance-based restricted stock units only after the performance period has lapsed and the performance thresholds have been met.

Under the Director Plans, we may grant options with a maximum term of 10 years, restricted shares, and restricted stock units to non-employee directors. Under the 2017 Plan, awards generally vest over one year and, in the case of restricted stock units, are settled upon the non-employee directors' departure from the Board. For restricted shares, cash dividends are accrued and paid only after the award vests. Restricted stock unit holders receive dividend equivalents in the form of unvested stock units that vest over the same period as the underlying award. We have not granted options to non-employee directors since 2016.

We recognize the grant-date fair value of these awards as compensation expense ratably over the awards' requisite service period. Compensation expense recognized for performance-based restricted units includes an estimate regarding the probability of the performance thresholds being met. We account for forfeitures as they occur. Both time-based and performance-based restricted stock units are valued on the grant-date using the closing market price of our common stock.

We used the following weighted-average inputs to the Black-Scholes option-pricing model to estimate the fair value of each option granted in 2016 to certain non-employee directors.

| Grant-date fair value per option awarded | $\$$ |
| :--- | :---: |
| Assumptions used: | 10.62 |
| Expected life in years | 6.8 |
| Expected volatility | $20 \%$ |
| Dividend yield | $2.5 \%$ |
| Risk-free interest rate | $1.6 \%$ |

Our expected life assumptions are based on the vesting period for each option grant and our historical experience with respect to the average holding period from vesting to option exercise. The assumptions for expected volatility are based on historical experience for the same periods as our expected lives. Dividend yields are based on recent historical experience and future expectations. Risk-free interest rates are set using grantdate U.S. Treasury yield curves for the same periods as our expected lives.

## Table of Contents

## Earnings per share

We compute our basic and diluted earnings per share under the two-class method, which considers our outstanding restricted shares and stock units, on which we pay non-forfeitable dividends as if they were a separate class of stock.

## Comprehensive income

The components of comprehensive income are presented in a separate statement following our consolidated statements of income and include net income and the change in our currency translation adjustments. The currency translation adjustments result from translating our proportionate share of the financial statements of our equity method investment in UTI, and certain consolidated T. Rowe Price investment products into U.S. dollars. Assets and liabilities are translated into U.S. dollars using year-end exchange rates, and revenues and expenses are translated using weighted-average exchange rates for the period. Prior to 2018, comprehensive income also included the change in net unrealized security holding gains (losses) on investments classified as available-for-sale.

The changes in accumulated balances of each component of other comprehensive income, the deferred tax impacts of each component, and information about significant items reclassified out of accumulated other comprehensive income are presented in the notes to the financial statements. The notes also indicate the line item of our consolidated statements of income in which the significant reclassifications were recognized.

We reclassify income tax effects relating to currency translation adjustments to tax expense when there is a reduction in our ownership interest in the related investment. The amount of the reclassification depends on the investment's accounting treatment before and after the change in ownership percentage. Prior to 2018, tax effects relating to each available-for-sale investment's unrealized holding gain or loss were reclassified upon the sale of the investment.

## NOTE 2 - CASH EQUIVALENTS.

Cash equivalent investments in the T. Rowe Price money market mutual funds aggregate $\$ 1,196.0$ million at December 31, 2018, and $\$ 1,726.4$ million at December 31, 2017. Dividends earned on these investments totaled $\$ 27.0$ million in 2018, $\$ 9.1$ million in 2017, and $\$ .3$ million in 2016.

## NOTE 3 - INFORMATION ABOUT RECEIVABLES, REVENUES, AND SERVICES.

Revenues earned during the years ended December 31, 2018, 2017 and 2016 under agreements with clients include:

|  | 2018 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | U.S. mutual funds |  | Subadvised and separate accounts and other investment products |  | Other clients |  | Total |  |
| Investment advisory fees | \$ | 3,375.0 | \$ | 1,475.6 | \$ | - | \$ | 4,850.6 |
| Administrative fees |  | 302.2 |  | - |  | 81.8 |  | 384.0 |
| Distribution and servicing fees |  | 138.0 |  | - |  | - |  | 138.0 |
| Net revenues | \$ | 3,815.2 | \$ | 1,475.6 | \$ | 81.8 | \$ | 5,372.6 |
|  |  |  |  |  |  |  |  |  |
|  | 2017 |  |  |  |  |  |  |  |
| (in millions) | U.S. mutual funds |  | Subadvised and separate accounts and other investment products |  | Other clients |  | Total |  |
| Investment advisory fees | \$ | 3,080.0 | \$ | 1,215.8 | \$ | - | \$ | 4,295.8 |
| Administrative fees |  | 333.6 |  | - |  | 78.5 |  | 412.1 |
| Distribution and servicing fees |  | 147.0 |  | - |  | - |  | 147.0 |
| Net revenues | \$ | 3,560.6 | \$ | 1,215.8 | \$ | 78.5 | \$ | 4,854.9 |
|  |  |  |  |  |  |  |  |  |
|  | 2016 |  |  |  |  |  |  |  |
| (in millions) | U.S. mutual funds |  | Subadvised and separate accounts and other investment products |  | Other clients |  | Total |  |
| Investment advisory fees | \$ | 2,711.7 | \$ | 1,023.3 | \$ | - | \$ | 3,735.0 |
| Administrative fees |  | 329.9 |  | - |  | 78.2 |  | 408.1 |
| Distribution and servicing fees |  | 141.7 |  | - |  | - |  | 141.7 |
| Net revenues | \$ | 3,183.3 | \$ | 1,023.3 | \$ | 78.2 | \$ | 4,284.8 |

The following table details the investment advisory fees earned from clients by their underlying asset class.

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. mutual funds |  |  |  |  |  |  |
| Equity and blended assets | \$ | 2,858.1 | \$ | 2,571.7 | \$ | 2,228.7 |
| Fixed income, including money market |  | 516.9 |  | 508.3 |  | 483.0 |
|  |  | 3,375.0 |  | 3,080.0 |  | 2,711.7 |
| Subadvised and separate accounts and other investment products |  |  |  |  |  |  |
| Equity and blended assets |  | 1,236.8 |  | 1,009.4 |  | 850.3 |
| Fixed income, including money market |  | 238.8 |  | 206.4 |  | 173.0 |
|  |  | 1,475.6 |  | 1,215.8 |  | 1,023.3 |
| Total | \$ | 4,850.6 | \$ | 4,295.8 | \$ | 3,735.0 |

## Table of Contents

The following table summarizes the investment portfolios and assets under management on which we earn investment advisory fees.

| (in billions) | Average during |  |  |  |  |  | As of December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2018 |  | 2017 |  |
| U.S. mutual funds |  |  |  |  |  |  |  |  |  |  |
| Equity and blended assets | \$ | 493.6 | \$ | 447.5 | \$ | 386.1 | \$ | 441.1 | \$ | 480.5 |
| Fixed income, including money market |  | 128.2 |  | 121.0 |  | 109.4 |  | 123.4 |  | 125.8 |
|  |  | 621.8 |  | 568.5 |  | 495.5 |  | 564.5 |  | 606.3 |
| Subadvised and separate accounts and other investment products |  |  |  |  |  |  |  |  |  |  |
| Equity and blended assets |  | 317.3 |  | 256.4 |  | 211.1 |  | 299.2 |  | 291.9 |
| Fixed income, including money market |  | 97.4 |  | 84.1 |  | 71.6 |  | 98.6 |  | 92.9 |
|  |  | 414.7 |  | 340.5 |  | 282.7 |  | 397.8 |  | 384.8 |
| Total | \$ | 1,036.5 | \$ | 909.0 | \$ | 778.2 | \$ | 962.3 | \$ | 991.1 |

Investors that we serve are primarily domiciled in the U.S.; investment advisory clients outside the U.S. account for about 6\% of our assets under management at December 31, 2018 and 2017.

Total net revenues earned from T. Rowe Price investment products totaled $\$ 4,453.6$ million in 2018, $\$ 4,038.8$ million in 2017, and $\$ 3,569.3$ million in 2016. Accounts receivable from these products aggregate to $\$ 354.8$ million at December 31, 2018 and $\$ 371.9$ million at December 31, 2017.

## NOTE 4 - INVESTMENTS.

The carrying values of investments not consolidated are as follows:

| (in millions) | 12/31/2018 |  | 12/31/2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Investments held at fair value |  |  |  |  |
| T. Rowe Price investment products ${ }^{(1)}$ | \$ | 1,538.4 | \$ | 692.1 |
| T. Rowe Price investment products designated as an economic hedge of supplemental savings plan liability |  | 381.3 |  | 268.2 |
| Investment partnerships and other investments ${ }^{(2)}$ |  | 99.6 |  | 78.0 |
| Equity method investments |  |  |  |  |
| T. Rowe Price investment products |  | 276.2 |  | 277.4 |
| 26\% interest in UTI Asset Management Company Limited (India) |  | 152.4 |  | 155.8 |
| Investment partnerships and other investments |  | 4.5 |  | 4.8 |
| U.S. Treasury note |  | 1.0 |  | 1.0 |
| Total | \$ | 2,453.4 | \$ | 1,477.3 |

${ }^{(1)}$ Includes $\$ 597.1$ million of investments at December 31, 2017, that were previously reported as available-for-sale investments prior to the adoption of the new financial instruments guidance on January 1, 2018. Refer to Note 1 for more information.
 using NAV per share as a practical expedient. Refer to Note 1 for more information.

The investment partnerships are carried at fair value using NAV per share as a practical expedient. Our interests in these partnerships are generally not redeemable and are subject to significant restrictions on transferability. The underlying investments of these partnerships have contractual terms through 2029, though we may receive distributions of liquidating assets over a longer term. The investment strategies of these partnerships include growth equity, buyout, venture capital, and real estate.

During 2018, we recognized $\$ 18.5$ million of net unrealized losses on investments held at fair value that were still held at December 31, 2018. For 2017 and 2016, the majority of unrealized gains or losses on investments held at fair value are included and presented with other comprehensive income.

Dividends, including capital gain distributions, earned on the T. Rowe Price investment products held at fair value, totaled $\$ 36.0$ million in 2018, $\$ 19.2$ million in 2017, and $\$ 15.8$ million in 2016.

During the years ended December 31, 2018, 2017 and 2016, certain T. Rowe Price investment products in which we provided initial seed capital at the time of formation were deconsolidated, as we no longer had a controlling interest. Depending on our ownership interest, we are now reporting our residual interests in these T. Rowe Price investment products as either an equity method investment or an investment held at fair value. Additionally, during the years ended December 31, 2018, 2017 and 2016, certain T. Rowe Price investment products that were being accounted for as equity method investments were consolidated, as we regained a controlling interest. The net impact of these changes on our consolidated balance sheets and statements of income as of the dates the portfolios were deconsolidated or reconsolidated is detailed below.

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net decrease in assets of consolidated T. Rowe Price investment products | \$ | (736.6) | \$ | $(1,397.2)$ | \$ | $(1,342.8)$ |
| Net increase (decrease) in liabilities of consolidated T. Rowe Price investment products | \$ | 17.6 | \$ | (153.1) | \$ | (37.3) |
| Net decrease in redeemable non-controlling interests | \$ | (626.4) | \$ | $(1,042.6)$ | \$ | (967.3) |
| Gains recognized upon deconsolidation | \$ | 3.6 | \$ | . 1 | \$ | 2.2 |

The gains recognized upon deconsolidation were the result of reclassifying currency translation adjustments accumulated on certain T . Rowe Price investment products with non-USD functional currencies from accumulated other comprehensive income to non-operating income.
During 2018, we sold our 10\% holding in Daiwa SB Investments Ltd. The realized gain is recognized in net gains on investments on our consolidated statement of income and represents the majority of the increase over the prior year periods.

## VARIABLE INTEREST ENTITIES.

Our investments at December 31, 2018 and 2017, include interests in variable interest entities that we do not consolidate as we are not deemed the primary beneficiary. Our maximum risk of loss related to our involvement with these entities is as follows:

| (in millions) | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Investment carrying values | \$ | 143.3 | \$ | 129.2 |
| Unfunded capital commitments |  | 27.3 |  | 38.8 |
| Uncollected investment advisory and administrative fees |  | 5.2 |  | 7.7 |
|  | \$ | 175.8 | \$ | 175.7 |

The unfunded capital commitments, totaling $\$ 27.3$ million at December 31, 2018, and $\$ 38.8$ million at December 31, 2017, relate primarily to investment partnerships in which we have an existing investment. In addition to such amounts, a percentage of prior distributions may be called under certain circumstances.

## NOTE 5 - FAIR VALUE MEASUREMENTS.

We determine the fair value of our cash equivalents and certain investments using the following broad levels of inputs as defined by related accounting standards:

Level 1 - quoted prices in active markets for identical securities.
Level 2 - observable inputs other than Level 1 quoted prices including, but not limited to, quoted prices for similar securities, interest rates, prepayment speeds, and credit risk. These inputs are based on market data obtained from independent sources.
Level 3 - unobservable inputs reflecting our own assumptions based on the best information available. We do not value any investments using Level 3 inputs.

## Table of Contents

These levels are not necessarily an indication of the risk or liquidity associated with our investments. The following table summarizes our investments that are recognized in our consolidated balance sheets using fair value measurements determined based on the differing levels of inputs. This table excludes investments held by consolidated T. Rowe Price investment products which are presented separately on our consolidated balance sheets and are detailed in Note 6.

|  | 12/31/2018 |  |  |  | 12/31/2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | Level 1 |  | Level 2 |  | Level 1 |  | Level 2 |  |
| Cash equivalents held in T. Rowe Price money market funds | \$ | 1,196.0 | \$ | - | \$ | 1,726.4 | \$ | - |
| T. Rowe Price investment products ${ }^{(1)}$ |  | 1,900.5 |  | 19.2 |  | 942.9 |  | 17.4 |
| Total | \$ | 3,096.5 | \$ | 19.2 | \$ | 2,669.3 | \$ | 17.4 |

${ }^{(1)}$ Includes $\$ 597.1$ million of investments at December 31, 2017 that were previously reported as available-for sale investments prior to the adoption of new financial instruments guidance on January 1, 2018. Refer to Note 1 for more information.

At December 31, 2018, the reported investments held at fair value in Note 4 include $\$ 99.6$ million of investments that are carried at fair value using the NAV per share as a practical expedient. These investments are not required to be included in the fair value hierarchy levels above.

## NOTE 6 - CONSOLIDATED T. ROWE PRICE INVESTMENT PRODUCTS.

The $T$. Rowe Price investment products that we consolidate in our consolidated financial statements are generally those products we provided initial seed capital at the time of their formation and have a controlling interest. Our U.S. mutual funds are considered voting interest entities, while those regulated outside the U.S. are considered variable interest entities.

The following table details the net assets of the consolidated T. Rowe Price investment products:

|  | 12/31/2018 |  |  |  |  |  | 12/31/2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | VOE |  | VIE |  | Total |  | VOE |  | VIE |  | Total |  |
| Cash and cash equivalents ${ }^{(1)}$ | \$ | 18.5 | \$ | 51.6 | \$ | 70.1 | \$ | 7.1 | \$ | 96.0 | \$ | 103.1 |
| Investments ${ }^{(2)}$ |  | 261.3 |  | 1,322.7 |  | 1,584.0 |  | 188.8 |  | 1,725.7 |  | 1,914.5 |
| Other assets |  | 8.0 |  | 18.3 |  | 26.3 |  | 12.9 |  | 17.9 |  | 30.8 |
| Total assets |  | 287.8 |  | 1,392.6 |  | 1,680.4 |  | 208.8 |  | 1,839.6 |  | 2,048.4 |
| Liabilities |  | 16.0 |  | 22.7 |  | 38.7 |  | 16.4 |  | 39.5 |  | 55.9 |
| Net assets | \$ | 271.8 | \$ | 1,369.9 | \$ | 1,641.7 | \$ | 192.4 | \$ | 1,800.1 | \$ | 1,992.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Attributable to T. Rowe Price Group | \$ | 175.3 | \$ | 726.1 | \$ | 901.4 | \$ | 131.6 | \$ | 868.1 | \$ | 999.7 |
| Attributable to redeemable non-controlling interests |  | 96.5 |  | 643.8 |  | 740.3 |  | 60.8 |  | 932.0 |  | 992.8 |
|  | \$ | 271.8 | \$ | 1,369.9 | \$ | 1,641.7 | \$ | 192.4 | \$ | 1,800.1 | \$ | 1,992.5 |

${ }^{(1)}$ Cash and cash equivalents includes $\$ 18.5$ million and $\$ 6.2$ million at December 31, 2018 and 2017, respectively, of investments in
T. Rowe Price money market mutual funds.
${ }^{\text {(2) }}$ Investments include $\$ 43.8$ million and $\$ 15.0$ million at December 31, 2018 and 2017, respectively, of T. Rowe Price investment products.
Although we can redeem our net interest in the T. Rowe Price investment products at any time, we cannot directly access or sell the assets held by these products to obtain cash for general operations. Additionally, the assets of these investment products are not available to our general creditors.

Since third-party investors in these investment products have no recourse to our credit, our overall risk related to the net assets of consolidated $T$. Rowe Price investment products is limited to valuation changes associated with our net interest. We, however, are required to recognize the valuation changes associated with all underlying investments held by these products in our consolidated statements of income and disclose the portion attributable to third-party investors as net income attributable to redeemable non-controlling interests.

The operating results of the consolidated T . Rowe Price investment products, are reflected in our consolidated statements of income as follows:

|  | 2018 |  |  |  |  |  | 2017 |  |  |  |  |  | 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | VOE |  | VIE |  | Total |  | VOE |  | VIE |  | Total |  | VOE |  | VIE |  | Total |  |
| Operating expenses reflected in net operating income | \$ | (1.9) | \$ | (10.8) | \$ | (12.7) | \$ | (1.1) | \$ | (11.2) | \$ | (12.3) | \$ | (1.6) | \$ | (11.4) | \$ | (13.0) |
| Net investment income (loss) reflected in non-operating income |  | (16.7) |  | (76.2) |  | (92.9) |  | 18.8 |  | 175.1 |  | 193.9 |  | 22.5 |  | 98.6 |  | 121.1 |
| Impact on income before taxes | \$ | (18.6) | \$ | (87.0) | \$ | (105.6) | \$ | 17.7 | \$ | 163.9 | \$ | 181.6 | \$ | 20.9 | \$ | 87.2 | \$ | 108.1 |

Net income (loss) attributable to T .
Rowe Price Group
Net income (loss) attributable to


The operating expenses of these consolidated products are reflected in other operating expenses. In preparing our consolidated financial statements, we eliminated operating expenses of $\$ 6.2$ million in 2018, $\$ 5.6$ million in 2017, and $\$ 6.5$ million in 2016, against the investment advisory and administrative fees earned from these products. The net investment income reflected in non-operating income includes dividend and interest income and realized and unrealized gains and losses on the underlying securities held by the consolidated T. Rowe Price investment products.

The following table details the impact of these consolidated investment products on the individual lines of our consolidated statements of cash flows.

| (in millions) | 2018 |  |  |  |  |  | 2017 |  |  |  |  |  | 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | VOE |  | VIE |  | Total |  | VOE |  | VIE |  | Total |  | VOE |  | VIE |  | Total |  |
| Net cash provided by (used in) operating activities |  | (43.9) | \$ | (505.2) | \$ | (549.1) | \$ | (33.0) | \$ | $(1,282.3)$ | \$ | $(1,315.3)$ | \$ | (80.1) | \$ | $(1,086.5)$ | \$ | $(1,166.6)$ |
| Net cash provided by (used in) investing activities |  | (.8) |  | (23.0) |  | (23.8) |  | (9.0) |  | (55.2) |  | (64.2) |  | 21.6 |  | 19.8 |  | 41.4 |
| Net cash provided by (used in) financing activities |  | 56.1 |  | 499.2 |  | 555.3 |  | 38.8 |  | 1,372.9 |  | 1,411.7 |  | 68.8 |  | 1,124.1 |  | 1,192.9 |
| FX impact on cash |  | - |  | (15.4) |  | (15.4) |  | - |  | 5.3 |  | 5.3 |  | - |  | (2.1) |  | (2.1) |
| Net change in cash and cash equivalents during period |  | 11.4 |  | (44.4) |  | (33.0) |  | (3.2) |  | 40.7 |  | 37.5 |  | 10.3 |  | 55.3 |  | 65.6 |
| Cash and cash equivalents at beginning of year |  | 7.1 |  | 96.0 |  | 103.1 |  | 10.3 |  | 55.3 |  | 65.6 |  | - |  | - |  | - |
| Cash and cash equivalents at end of year | \$ | 18.5 | \$ | 51.6 | \$ | 70.1 | \$ | 7.1 | \$ | 96.0 | \$ | 103.1 | \$ | 10.3 | \$ | 55.3 | \$ | 65.6 |

The net cash provided by financing activities includes $\$ 84.9$ million in 2018, $\$ 130.1$ million in 2017 and $\$ 277.9$ million in 2016, of net subscriptions we made into the consolidated T. Rowe Price investment products, net of dividends received. These cash flows were eliminated in consolidation.

Page 68

## FAIR VALUE MEASUREMENTS.

We determine the fair value of investments held by consolidated T. Rowe Price investment products using the following broad levels of inputs as defined by related accounting standards:

Level 1 - quoted prices in active markets for identical securities.
Level 2 - observable inputs other than Level 1 quoted prices including, but not limited to, quoted prices for similar securities, interest rates, prepayment speeds, and credit risk. These inputs are based on market data obtained from independent sources.
Level 3 - unobservable inputs reflecting our own assumptions based on the best information available. The value of investments using Level 3 inputs is insignificant.

These levels are not necessarily an indication of the risk or liquidity associated with these investment holdings. The following table summarizes the investment holdings held by our consolidated $T$. Rowe Price investment products using fair value measurements determined based on the differing levels of inputs.

|  | 12/31/2018 |  |  |  | 12/31/2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | Level 1 |  | Level 2 |  | Level 1 |  | Level 2 |  |
| Assets |  |  |  |  |  |  |  |  |
| Cash equivalents | \$ | 19.3 | \$ | - | \$ | 6.2 | \$ | . 7 |
| Equity securities |  | 189.6 |  | 483.5 |  | 536.0 |  | 667.5 |
| Fixed income securities |  | - |  | 890.2 |  | - |  | 687.4 |
| Other investments |  | 1.7 |  | 19.0 |  | 1.3 |  | 22.3 |
|  | \$ | 210.6 | \$ | 1,392.7 | \$ | 543.5 | \$ | 1,377.9 |
|  |  |  |  |  |  |  |  |  |
| Liabilities | \$ | (.8) | \$ | (12.8) | \$ | (.1) | \$ | (13.7) |

## NOTE 7 - PROPERTY AND EQUIPMENT.

Property and equipment at December 31 consists of:

| (in millions) | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Computer and communications software and equipment | \$ | 864.7 | \$ | 824.4 |
| Buildings and improvements |  | 454.5 |  | 442.5 |
| Leasehold improvements |  | 137.0 |  | 121.0 |
| Furniture and other equipment |  | 178.9 |  | 168.9 |
| Land |  | 37.4 |  | 37.4 |
| Leased land |  | 2.7 |  | 2.7 |
|  |  | 1,675.2 |  | 1,596.9 |
| Less accumulated depreciation and amortization |  | 1,013.9 |  | 944.9 |
| Total | \$ | 661.3 | \$ | 652.0 |

Compensation and related costs attributable to the development of computer software for internal use, totaling $\$ 85.5$ million in 2018 , $\$ 62.3$ million in 2017, and $\$ 28.9$ million in 2016, have been capitalized.

We occupy certain office facilities and lease computer and other equipment under noncancelable operating leases. Related rental expense was $\$ 40.1$ million in 2018, $\$ 36.0$ million in 2017, and $\$ 32.8$ million in 2016 . Future minimum payments under these leases aggregate to: $\$ 31.5$ million in 2019, $\$ 26.8$ million in 2020, $\$ 22.9$ million in 2021, $\$ 17.9$ million in $2022, \$ 15.2$ million in 2023, and $\$ 53.4$ million in later years.

## NOTE 8 - INCOME TAXES.

The provision for income taxes consists of:

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current income taxes |  |  |  |  |  |  |
| U.S. federal | \$ | 484.2 | \$ | 708.1 | \$ | 573.7 |
| State and local |  | 138.7 |  | 131.0 |  | 105.8 |
| Foreign |  | 28.5 |  | 13.1 |  | 13.5 |
| Deferred income taxes (benefits) |  | (35.5) |  | 71.7 |  | 13.5 |
| Total | \$ | 615.9 | \$ | 923.9 | \$ | 706.5 |

On December 22, 2017, the U.S. enacted a comprehensive tax reform bill. The Tax Reform included numerous changes to existing tax laws, including a permanent reduction in the federal corporate income tax rate. For the years ended December 31, 2018 and 2017, the income tax provision includes nonrecurring charges of $\$ 20.8$ million and $\$ 71.1$ million, respectively, related to the enactment of Tax Reform. As of December 31, 2018, we have completed our accounting for the income tax effects of Tax Reform.

On April 24, 2018, the state of Maryland enacted new state tax legislation. This new state tax legislation, effective in 2018, adopted a five-year phase-in of the single sales factor method of apportionment for calculating income tax for multi-state companies doing business in Maryland and is expected to result in a net benefit over time. We recognized a nonrecurring charge of $\$ 7.9$ million during 2018 for the re-measurement of our deferred tax assets and liabilities to reflect the effect of this Maryland state tax legislation.

Deferred income taxes and benefits arise from temporary differences between taxable income for financial statement and income tax return purposes. The deferred income taxes (benefits) recognized as part of our provision for income taxes is related to:

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Property and equipment | \$ | 11.0 | \$ | (3.9) | \$ | 3.2 |
| Stock-based compensation |  | 7.1 |  | 72.4 |  | 1.3 |
| Accrued compensation |  | (2.2) |  | 1.2 |  | (1.7) |
| Supplemental savings plan liability |  | (17.4) |  | (8.3) |  | (30.9) |
| Asset impairments |  | . 9 |  | 7.3 |  | 10.0 |
| Unrealized holding gains recognized in non-operating income |  | (32.0) |  | 10.7 |  | 31.6 |
| Other |  | (2.9) |  | (7.7) |  | - |
| Total deferred income taxes (benefits) | \$ | (35.5) | \$ | 71.7 | \$ | 13.5 |

The following table reconciles the statutory federal income tax rate to our effective income tax rate.

|  | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Statutory U.S. federal income tax rate | 21.0 \% | 35.0 \% | 35.0 \% |
| Impact of nonrecurring charge relating to U.S. tax reform | . 8 | 2.9 | - |
| Impact of nonrecurring charge related to Maryland state tax legislation | . 3 | - | - |
| State income taxes for current year, net of federal income tax benefits ${ }^{(1)}$ | 4.6 | 3.9 | 3.8 |
| Net income attributable to redeemable non-controlling interests | . 7 | (1.3) | (.7) |
| Net excess tax benefits from stock-based compensation plans activity | (1.7) | (3.0) | (1.7) |
| Other items | . 1 | (.6) | (.4) |
| Effective income tax rate | 25.8 \% | 36.9 \% | 36.0 \% |

Page 70

## Table of Contents

The net deferred tax assets recognized in our consolidated balance sheets in other assets as of December 31 relate to the following:

| (in millions) | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
| Deferred tax liabilities |  |  |  |  |
| Property and equipment | \$ | (46.3) | \$ | (35.3) |
| Net unrealized holding gains recognized in income |  | (30.1) |  | (53.9) |
| Net unrealized holding gains on investments held as available-for-sale |  | - |  | (3.1) |
| Other |  | (20.4) |  | (18.9) |
|  |  | (96.8) |  | (111.2) |
| Deferred tax assets |  |  |  |  |
| Stock-based compensation |  | 85.6 |  | 92.7 |
| Asset impairments |  | 7.9 |  | 8.8 |
| Accrued compensation |  | 6.6 |  | 4.4 |
| Supplemental savings plan |  | 84.0 |  | 66.6 |
| Currency translation adjustment |  | 11.4 |  | 2.2 |
| Other |  | 11.2 |  | 6.8 |
|  |  | 206.7 |  | 181.5 |
| Net deferred tax asset | \$ | 109.9 | \$ | 70.3 |

We have not recognized a state deferred tax liability for unremitted earnings of our foreign subsidiaries as T. Rowe Price intends to indefinitely reinvest these earnings outside the U.S. The unremitted earnings of these subsidiaries are estimated to be approximately $\$ 656$ million at December 31, 2018. If these earnings were distributed to the U.S. in the form of dividends or otherwise, or if any of the entities were sold or otherwise transferred, we would be subject to state and local income taxes. Determination of the amount of the unrecognized deferred state liability related to these earnings is not practicable.

Other assets include tax refund receivables of $\$ 21.9$ million at December 31, 2018, and $\$ 43.2$ million at December 31, 2017.
Cash outflows from operating activities include net income taxes paid of $\$ 644.2$ million in 2018, $\$ 857.7$ million in 2017, and $\$ 680.6$ million in 2016.
Additional income tax benefit arising from stock-based compensation plans activity totaling $\$ 40.6$ million in 2018, $\$ 75.5$ million in 2017, and $\$ 31.6$ million in 2016 reduced the amount of income taxes that would have otherwise been payable. These income tax benefits were recognized in the income tax provision.

The following table summarizes the changes in our unrecognized tax benefits.

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at beginning of year | \$ | 7.6 | \$ | 6.2 | \$ | 5.8 |
| Changes in tax positions related to |  |  |  |  |  |  |
| Current year |  | 5.8 |  | 1.5 |  | . 6 |
| Prior years |  | 3.8 |  | . 1 |  | - |
| Expired statute of limitations |  | (1.1) |  | (.2) |  | (.2) |
| Balance at end of year | \$ | 16.1 | \$ | 7.6 | \$ | 6.2 |

If recognized, these tax benefits would affect our effective tax rate; however, we do not expect that unrecognized tax benefits for tax positions taken with respect to 2018 and prior years will significantly change in 2019. The U.S. has concluded examinations related to federal tax obligations through the year 2016. A net interest payable related to our unrecognized tax benefits of $\$ 1.2$ million at December 31, 2018, and $\$ 1.5$ million at December 31, 2017, are recognized in our consolidated balance sheets. Our accounting policy with respect to interest and penalties arising
from income tax settlements is to recognize them as part of our provision for income taxes. Interest recognized as part of our provision for income taxes was not material.

## NOTE 9 - STOCKHOLDERS' EQUITY.

## SHARE REPURCHASES.

At December 31, 2018, a liability of $\$ 9.2$ million is included in accounts payable and accrued expenses for common stock repurchases that settled during the first week of January 2019.

The Board of Directors has authorized the future repurchase of up to $14,347,806$ common shares as of December 31, 2018.

## RESTRICTED CAPITAL.

Our consolidated stockholders' equity at December 31, 2018, includes about $\$ 170$ million that is restricted as to use by various regulations and agreements arising in the ordinary course of our business.

## NOTE 10 - STOCK-BASED COMPENSATION.

## SHARES AUTHORIZED FOR STOCK-BASED COMPENSATION PROGRAMS.

At December 31, 2018, a total of $37,976,738$ shares of unissued common stock were authorized for issuance under our stock-based compensation plans. Additionally, a total of $2,340,343$ shares are authorized for issuance under a plan whereby substantially all employees may acquire common stock through payroll deductions at prevailing market prices.

## STOCK OPTIONS.

The following table summarizes the status of, and changes in, our stock options during 2018.

|  | Options | Weightedaverage exercise price |  | Weighted-average remaining contractual term in years |
| :---: | :---: | :---: | :---: | :---: |
| Outstanding at December 31, 2017 | 15,221,123 | \$ | 66.98 |  |
| Exercised | $(3,831,062)$ | \$ | 60.68 |  |
| Forfeited | $(73,416)$ | \$ | 76.08 |  |
| Expired | $(16,252)$ | \$ | 71.99 |  |
| Outstanding at December 31, 2018 | 11,300,393 | \$ | 69.05 | 4.5 |
| Exercisable at December 31, 2018 | 9,251,542 |  | 67.39 | 4.1 |

Compensation and related costs includes a charge for stock option-based compensation expense of $\$ 15.3$ million in 2018, $\$ 28.1$ million in 2017, and $\$ 44.9$ million in 2016.

The total intrinsic value of options exercised was $\$ 208.4$ million in 2018 , $\$ 293.0$ million in 2017, and $\$ 150.5$ million in 2016. At December 31, 2018, the aggregate intrinsic value of in-the-money options outstanding was $\$ 262.9$ million, including $\$ 230.6$ million related to options exercisable.

## RESTRICTED SHARES AND STOCK UNITS.

The following table summarizes the status of, and changes in, our nonvested restricted shares and restricted stock units during 2018.

|  | Restricted shares | Restricted stock units | Weightedaverage fair value |  |
| :---: | :---: | :---: | :---: | :---: |
| Nonvested at December 31, 2017 | 473,115 | 5,556,911 | \$ | 82.37 |
| Time-based grants | 8,775 | 2,438,198 | \$ | 92.37 |
| Performance-based grants | - | 160,821 | \$ | 92.03 |
| Vested (value at vest date was $\$ 160.9$ million) | $(330,920)$ | $(1,412,089)$ | \$ | 79.32 |
| Forfeited | $(14,006)$ | $(139,921)$ | \$ | 79.74 |
| Nonvested at December 31, 2018 | 136,964 | 6,603,920 | \$ | 87.07 |

Nonvested at December 31, 2018 includes 2,400 performance-based restricted shares and 473,615 performance-based restricted stock units. These nonvested performance-based restricted shares and units include 2,400 shares and 198,340 units for which the performance period has lapsed and the performance threshold has been met.

Compensation and related costs includes expenses for restricted shares and restricted stock units of $\$ 181.8$ million in 2018, $\$ 124.0$ million in 2017, and $\$ 116.7$ million in 2016.

At December 31, 2018, non-employee directors held 47,639 vested stock units that will convert to common shares upon their separation from the Board.

## FUTURE STOCK-BASED COMPENSATION EXPENSE.

The following table presents the compensation expense to be recognized over the remaining vesting periods of the stock-based awards outstanding at December 31, 2018. Estimated future compensation expense will change to reflect future grants, changes in the probability of performance thresholds being met, and adjustments for actual forfeitures.

| (in millions) |  |  |
| :---: | :---: | :---: |
| First quarter 2019 | \$ | 51.4 |
| Second quarter 2019 |  | 50.6 |
| Third quarter 2019 |  | 50.5 |
| Fourth quarter 2019 |  | 45.2 |
| Total 2019 |  | 197.7 |
| 2020 through 2024 |  | 188.6 |
| Total | \$ | 386.3 |

## NOTE 11 - EARNINGS PER SHARE CALCULATIONS.

The following table presents the reconciliation of net income attributable to T. Rowe Price Group to net income allocated to our common stockholders and the weighted-average shares that are used in calculating the basic and diluted earnings per share on our common stock. Weighted-average common shares outstanding assuming dilution reflect the potential dilution, determined using the treasury stock method, that could occur if outstanding stock options were exercised and non-participating stock awards vested.

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net income attributable to T . Rowe Price Group | \$ | 1,837.5 | \$ | 1,497.8 | \$ | 1,215.0 |
| Less: net income allocated to outstanding restricted stock and stock unit holders |  | 43.6 |  | 33.9 |  | 25.5 |
| Net income allocated to common stockholders | \$ | 1,793.9 | \$ | 1,463.9 | \$ | 1,189.5 |
|  |  |  |  |  |  |  |
| Weighted-average common shares |  |  |  |  |  |  |
| Outstanding |  | 242.2 |  | 241.2 |  | 245.5 |
| Outstanding assuming dilution |  | 246.9 |  | 245.1 |  | 250.3 |

The following table shows the weighted-average outstanding stock options that are excluded from the calculation of diluted earnings per common share as the inclusion of such shares would be anti-dilutive.

| (in millions) | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Weighted-average outstanding stock options excluded | - | 5.0 | 9.9 |

## NOTE 12 - OTHER COMPREHENSIVE INCOME AND ACCUMULATED OTHER COMPREHENSIVE INCOME.

The following table presents the impact of the components of other comprehensive income or loss on deferred tax benefits (income taxes).

| (in millions) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net deferred tax benefits (income taxes) on: |  |  |  |  |  |  |
| Currency translation adjustments | \$ | 8.3 | \$ | (18.5) | \$ | 3.5 |
| Reclassification adjustment recognized in the provision for income taxes upon deconsolidation of T. Rowe Price investment product |  | . 9 |  | - |  | . 8 |
| Total deferred tax benefits (income taxes) on currency translation adjustments |  | 9.2 |  | (18.5) |  | 4.3 |
| Net unrealized holding gains or losses ${ }^{(1)}$ |  | - |  | (14.6) |  | . 6 |
| Reclassification adjustments recognized in the provision for income taxes: |  |  |  |  |  |  |
| Capital gain distributions |  | - |  | 1.4 |  | 2.4 |
| Net gains realized on dispositions |  | - |  | 32.5 |  | 20.9 |
| Net gains recognized upon transfer to trading investments |  | - |  | 9.2 |  | - |
| Net deferred tax benefits (income taxes) on net unrealized holding gains or losses |  | - |  | 28.5 |  | 23.9 |
| Total net deferred tax benefits | \$ | 9.2 | \$ | 10.0 | \$ | 28.2 |

${ }^{(1)}$ On January 1, 2018, we implemented new accounting guidance that eliminated the available-for-sale investment category for equity securities and required unrealized holding gains on equity securities to be recognized in the consolidated income statement. Prior to this guidance, unrealized holding gains for available-for-sale equity securities were recognized in accumulated other comprehensive income and reclassified to the consolidated income statement upon sale of the investment. As a result of this change, reclassification of unrealized holding gains from accumulated other comprehensive income did not occur in 2018. Refer to Note 1 for more information.

## Table of Contents

The changes in each component of accumulated other comprehensive income (loss), including reclassification are presented below.

| (in millions) | Currency translation adjustments |  |  |  |  |  | $\begin{gathered} \text { Net } \\ \text { unrealized } \\ \text { holding gains } \end{gathered}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Equity method investments |  | Consolidated T. Rowe Price investment products - variable interest entities |  | Total currency translation adjustments |  |  |  |  |  |
| Balances at December 31, 2015 | \$ | (30.9) | \$ | (2.8) | \$ | (33.7) | \$ | 120.3 | \$ | 86.6 |
| Reclassification of accumulated other comprehensive income to retained earnings upon adoption of the new consolidation accounting guidance |  | (.5) |  | - |  | (.5) |  | (32.0) |  | (32.5) |
| Balance at January 1, 2016 |  | (31.4) |  | (2.8) |  | (34.2) |  | 88.3 |  | 54.1 |
| Other comprehensive income (loss) before reclassifications and income taxes |  | (1.6) |  | (7.0) |  | (8.6) |  | (7.0) |  | (15.6) |
| Reclassification adjustments recognized in non-operating income |  | - |  | (2.2) |  | (2.2) |  | (53.0) |  | (55.2) |
|  |  | (1.6) |  | (9.2) |  | (10.8) |  | (60.0) |  | (70.8) |
| Net deferred tax benefits (income taxes) |  | . 7 |  | 3.6 |  | 4.3 |  | 23.9 |  | 28.2 |
| Other comprehensive income (loss) |  | (.9) |  | (5.6) |  | (6.5) |  | (36.1) |  | (42.6) |
| Balances at December 31, 2016 |  | (32.3) |  | (8.4) |  | (40.7) |  | 52.2 |  | 11.5 |
| Other comprehensive income (loss) before reclassifications and income taxes |  | 2.6 |  | 45.2 |  | 47.8 |  | 37.4 |  | 85.2 |
| Reclassification adjustments recognized in non-operating income |  | - |  | (.1) |  | (.1) |  | (110.2) |  | (110.3) |
|  |  | 2.6 |  | 45.1 |  | 47.7 |  | (72.8) |  | (25.1) |
| Net deferred tax benefits (income taxes) |  | (.9) |  | (17.6) |  | (18.5) |  | 28.5 |  | 10.0 |
| Other comprehensive income (loss) |  | 1.7 |  | 27.5 |  | 29.2 |  | (44.3) |  | (15.1) |
| Balances at December 31, 2017 |  | (30.6) |  | 19.1 |  | (11.5) |  | 7.9 |  | (3.6) |
| Reclassification of unrealized holding gains to retained earnings upon adoption of new financial instruments guidance ${ }^{(1)^{(2)}}$ |  | - |  | - |  | - |  | (7.9) |  | (7.9) |
| Reclassification adjustment of stranded tax benefits on currency translation adjustments upon adoption of new accumulated other comprehensive income guidance |  | (6.4) |  | 4.1 |  | (2.3) |  | - |  | (2.3) |
| Balance at January 1, 2018 |  | (37.0) |  | 23.2 |  | (13.8) |  | - |  | (13.8) |
| Other comprehensive income (loss) before reclassifications and income taxes |  | (15.2) |  | (18.6) |  | (33.8) |  | - |  | (33.8) |
| Reclassification adjustments recognized in non-operating income |  | - |  | (3.6) |  | (3.6) |  | - |  | (3.6) |
|  |  | (15.2) |  | (22.2) |  | (37.4) |  | - |  | (37.4) |
| Net deferred tax benefits (income taxes) |  | 3.4 |  | 5.8 |  | 9.2 |  | - |  | 9.2 |
| Other comprehensive income (loss) |  | (11.8) |  | (16.4) |  | (28.2) |  | - |  | (28.2) |
| Balances at December 31, 2018 | \$ | (48.8) | \$ | 6.8 | \$ | (42.0) | \$ | - | \$ | (42.0) |

${ }^{(1)}$ On January 1, 2018, we implemented new accounting guidance that eliminated the available-for-sale investment category for equity securities $\overline{\overline{\text { and required unrealized holding }}}$ gains on most equity securities to be recognized in the consolidated income statement. Prior to this guidance, unrealized holding gains for available-for-sale equity securities were recognized in accumulated other comprehensive income. Upon adoption, we reclassified the accumulated net of tax unrealized holding gain related to our available-forsale investment portfolio from accumulated other comprehensive income to retained earnings. Refer to Note 1 for more information.
${ }^{(2)}$ Includes the reclassification of $\$ 1.7$ million of stranded income taxes on available-for-sale investments resulting from U.S. tax law changes enacted on December 22, 2017, from accumulated other comprehensive income to retained earnings.

## NOTE 13 - DELL APPRAISAL RIGHTS MATTER.

In 2016, we paid $\$ 166.2$ million to compensate certain U.S. mutual funds, trusts, separately managed accounts, and subadvised clients (collectively, "Clients") for the denial of their appraisal rights by the Delaware Chancery Court ("Court") in connection with the 2013 leveraged buyout of Dell, Inc. ("Dell").

On December 30, 2016, we entered into a settlement agreement for $\$ 100.0$ million with our insurance carrier for insurance proceeds related to this matter. We recognized the proceeds as a reduction to the $\$ 166.2$ million nonrecurring charge that we recognized in 2016 and received the proceeds in January 2017. We received an additional $\$ 50$ million in insurance proceeds from other insurance carriers in early 2017 and recognized a related reduction in operating expenses.

In accordance with the compensation payment, the Clients agreed that in the event the findings made by the Court regarding the fair value of Dell were modified by a final, non-appealable judgment, T. Rowe Price and the Clients would make an appropriate adjustment between themselves, calculated in a manner that is consistent with the methodology used to compensate Clients. We have obtained repayments from Clients because all parties have settled with Dell, and the Court has approved those settlements in final non-appealable judgments. T. Rowe Price retained the first $\$ 15.2$ million in repayments received in the fourth quarter of 2018 and paid back our insurers the remaining amount received. We recognized $\$ 15.2$ million as a reduction in operating expenses.

## NOTE 14 - COMMITMENTS AND CONTINGENCIES.

On February 14, 2017, T. Rowe Price Group, Inc., T. Rowe Price Associates, Inc., T. Rowe Price Trust Company, current and former members of the management committee, and trustees of the T. Rowe Price U.S. Retirement Program were named as defendants in a lawsuit filed in the United States District Court for the District of Maryland. The lawsuit alleges breaches of ERISA's fiduciary duty and prohibited transaction provisions on behalf of a class of all participants and beneficiaries of the T. Rowe Price 401(k) Plan from February 14, 2011, to the time of judgment. The plaintiffs are seeking certification of the complaint as a class action. T. Rowe Price believes the claims are without merit and is vigorously defending the action. This matter is in the early stages of litigation and we cannot predict the eventual outcome or whether it will have a material negative impact on our financial results, or estimate the possible loss or range of loss that may arise from any negative outcome.

On April 27, 2016, certain shareholders in the T. Rowe Price Blue Chip Growth Fund, T. Rowe Price Capital Appreciation Fund, T. Rowe Price Equity Income Fund, T. Rowe Price Growth Stock Fund, T. Rowe Price International Stock Fund, T. Rowe Price High Yield Fund, T. Rowe Price New Income Fund and T. Rowe Price Small Cap Stock Fund (the "Funds") filed a Section 36(b) complaint under the caption Zoidis v. T. Rowe Price Assoc., Inc., against T. Rowe Price Associates, Inc. ("T. Rowe Price") in the United States District Court for the Northern District of California. The complaint alleges that the management fees for the identified funds are excessive because T. Rowe Price charges lower advisory fees to subadvised clients with funds in the same strategy. The complaint seeks to recover the allegedly excessive advisory fees received by T . Rowe Price in the year preceding the start of the lawsuit, along with investments' returns and profits. In the alternative, the complaint seeks the rescission of each fund's investment management agreement and restitution of any allegedly excessive management fees. T. Rowe Price believes the claims are without merit and is vigorously defending the action. This matter is in the discovery phase of litigation and we cannot predict the eventual outcome or whether it will have a material negative impact on our financial results, or estimate the possible loss or range of loss that may arise from any negative outcome.

In addition to the matters discussed above, various claims against us arise in the ordinary course of business, including employment-related claims. In the opinion of management, after consultation with counsel, the likelihood of an adverse determination in one or more of these pending ordinary course of business claims that would have a material adverse effect on our financial position or results of operations is remote.

## NOTE 15 - OTHER DISCLOSURES.

## RETIREMENT PLANS.

Compensation and related costs includes expense recognized for our defined contribution retirement plans of $\$ 105.6$ million in 2018, $\$ 89.4$ million in 2017, and $\$ 80.7$ million in 2016.

## SUPPLEMENTAL SAVINGS PLAN.

The Supplemental Savings Plan provides certain senior officers the opportunity to defer receipt of up to $100 \%$ of their cash incentive compensation earned for a respective calendar year during which services are provided. The amounts deferred are adjusted in accordance with the hypothetical investments chosen by the officer from a list of mutual funds. The officer can initially defer these amounts for a period of two to 15 years. Certain senior officers elected to defer $\$ 118.9$ million in 2018, $\$ 95.5$ million in 2017, and $\$ 83.4$ million in 2016.

## NOTE 16 - SUPPLEMENTARY QUARTERLY FINANCIAL DATA (Unaudited).

|  | Net revenues ${ }^{(1)}$ |  | Net income ${ }^{(2)(3)(4)}$ |  | Net income attributable to T. Rowe Price Group ${ }^{(2)(3)(4)}$ |  | Basic earnings on common stock ${ }^{(2)(3)}$ (4)(5) |  | Diluted earnings on common stock ${ }^{(2)(3)(4)(5)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (in millions) |  |  |  |  |  | (per share) |  |  |  |
| $\underline{2018}$ |  |  |  |  |  |  |  |  |  |  |
| 1st quarter | \$ | 1,328.0 | \$ | 455.5 | \$ | 453.7 | \$ | 1.81 | \$ | 1.77 |
| 2nd quarter | \$ | 1,345.0 | \$ | 459.6 | \$ | 448.9 | \$ | 1.81 | \$ | 1.77 |
| 3 rd quarter | \$ | 1,394.6 | \$ | 581.6 | \$ | 583.0 | \$ | 2.34 | \$ | 2.30 |
| 4th quarter | \$ | 1,305.0 | \$ | 272.0 | \$ | 351.9 | \$ | 1.43 | \$ | 1.41 |
|  |  |  |  |  |  |  |  |  |  |  |
| $\underline{2017}$ |  |  |  |  |  |  |  |  |  |  |
| 1st quarter | \$ | 1,132.6 | \$ | 400.4 | \$ | 385.9 | \$ | 1.56 | \$ | 1.54 |
| 2nd quarter | \$ | 1,186.0 | \$ | 390.0 | \$ | 373.9 | \$ | 1.52 | \$ | 1.50 |
| 3rd quarter | \$ | 1,238.7 | \$ | 404.2 | \$ | 390.9 | \$ | 1.59 | \$ | 1.56 |
| 4th quarter | \$ | 1,297.6 | \$ | 386.6 | \$ | 347.1 | \$ | 1.40 | \$ | 1.37 |

${ }^{11}$ Net revenues for 2017 have been adjusted to reflect the adoption of new revenue accounting guidance on January 1, 2018. We adopted the guidance using the retrospective method, which required adjustments to be reflected as of January 1, 2016. See the New Accounting Guidance section of Note 1 to the consolidated financial statements for more information about the adoption of this guidance.
${ }^{(2)}$ During the first quarter of 2017, we recognized $\$ 50$ million in insurance recoveries or $\$ .12$ in diluted earnings per share relating to the Dell matter. In the fourth quarter of 2018 we recognized a $\$ 15.2$ million reduction in operating expenses, or $\$ .05$ in diluted earnings per share, upon recovering a portion of the payments we made to our clients in 2016. For more details related to the Dell appraisal rights matter, see Note 13 to the consolidated financial statements.
${ }^{(3)}$ During the fourth quarter of 2017 and the second quarter of 2018, we recognized nonrecurring charges of $\$ 71.1$ million and $\$ 20.8$ million, respectively, or $\$ .28$ and $\$ .08$ in diluted earnings per share related to the U.S. tax law changes that were enacted on December 22, 2017. During the second quarter of 2018 we recognized an additional nonrecurring charge of $\$ 7.9$ million, or $\$ .03$ in diluted earnings per share for the re-measurement of our deferred tax assets and liabilities to reflect the effect of Maryland state tax legislation enacted on April 24, 2018. See Note 8 to the consolidated financial statements for further details.
${ }^{(4)}$ During the third quarter of 2018, we recognized a realized gain of $\$ .27$ in diluted earnings per share from the sale of our 10\% holding in Daiwa SB Investments Ltd.
${ }^{(5)}$ The sums of quarterly earnings per share may not equal annual earnings per share because the computations are done independently.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
T. Rowe Price Group, Inc.:

## Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of T. Rowe Price Group, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, "the consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 13, 2019, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

## Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company 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 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.
/s/ KPMG LLP

We have served as the Company's auditor since 2001.
Baltimore, Maryland
February 13, 2019

## Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

## Item 9A. Controls and Procedures.

Our management, including our principal executive and principal financial officers, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2018. Based on that evaluation, our principal executive and principal financial officers have concluded that our disclosure controls and procedures as of December 31, 2018, are effective at the reasonable assurance level to ensure that the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, including our Form 10-K annual report, is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms, and to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Our management, including our principal executive and principal financial officers, has evaluated any change in our internal control over financial reporting that occurred during the fourth quarter of 2018, and has concluded that there was no change during the fourth quarter of 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's report on our internal control over financial reporting and the attestation report of KPMG LLP follow after Item 9B.

## Item 9B. Other Information.

None.

## REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Stockholders of T. Rowe Price Group, Inc.:
We, together with other members of management of T. Rowe Price Group, Inc., (the "Company")are responsible for establishing and maintaining adequate internal control over the Company's financial reporting. Internal control over financial reporting is the process designed under our supervision, and effected by the Company's Board of Directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

There are inherent limitations in the effectiveness of internal control over financial reporting, including the possibility that misstatements may not be prevented or detected. Accordingly, even effective internal controls over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Furthermore, the effectiveness of internal controls can change with circumstances.

Management has evaluated the effectiveness of internal control over financial reporting as of December 31, 2018, in relation to criteria described in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on management's assessment, we believe that the Company's internal control over financial reporting was effective as of December 31, 2018.

KPMG LLP, an independent registered public accounting firm, has audited our financial statements that are included in this annual report and expressed an unqualified opinion thereon. KPMG has also expressed an unqualified opinion on the effective operation of our internal control over financial reporting as of December 31, 2018.

February 13, 2019
/s/ William J. Stromberg
President and Chief Executive Officer
/s/ Céline $S$. Dufétel,
Vice President, Chief Financial Officer and Treasurer

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
T. Rowe Price Group, Inc.:

## Opinion on Internal Control Over Financial Reporting

We have audited T. Rowe Price Group, Inc. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, "the consolidated financial statements"), and our report dated February 13, 2019, expressed an unqualified opinion on those consolidated financial statements.

## Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

## Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.
/s/ KPMG LLP
Baltimore, Maryland
February 13, 2019

## Table of Contents

PART III

## Item 10.Directors, Executive Officers and Corporate Governance.

Information required by this item as to the identification of our executive officers is furnished in a separate item at the end of Part I of this Report. Other information required by this item is incorporated by reference from the definitive proxy statement required to be filed pursuant to Regulation 14A for the 2019 Annual Meeting of our stockholders.

## Item 11.Executive Compensation.

## Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Item 13.Certain Relationships and Related Transactions, and Director Independence.
Item 14.Principal Accountant Fees and Services.
Information required by these items is incorporated by reference from the definitive proxy statement required to be filed pursuant to Regulation 14A for the 2019 Annual Meeting of our stockholders.

## PART IV

## Item 15. Exhibits, Financial Statement Schedules.

The following documents are filed as part of this report.
(1) Financial Statements: See Item 8 of Part II of this report.
(2) Financial Statement Schedules: None.
(3) The following exhibits required by Item 601 of Regulation S-K are filed herewith, except for Exhibit 32 that is furnished herewith. Management contracts and compensatory plans and arrangements are identified with an asterisk (*).

3(i) Charter of T. Rowe Price Group, Inc., as reflected by Articles of Restatement dated June 20, 2018. (Incorporated by reference from Form 10-Q Quarterly Report filed on July 25, 2018.)

3(ii) Amended and Restated By-Laws of T. Rowe Price Group, Inc., as of February 12, 2019. (Incorporated by reference from Form 8-K Current Report filed on February 13, 2019.)
10.01.1 Representative Investment Management Agreement for the T. Rowe Price mutual funds that pay a management fee consisting of two components - a group management fee and individual management fee. (Incorporated by reference from Form 485BPOS filed on July 27, 2017.)
10.01.2 Representative Investment Management Agreement for the T. Rowe Price mutual funds that pay an individual management fee. (Incorporated by reference from Form 485BPOS filed on August 13, 2015.)
10.01.3 Representative Investment Management Agreement for the T. Rowe Price mutual funds that pay an all-inclusive fee (i.e., a single fee that covers investment management and ordinary recurring operating expenses). (Incorporated by reference from Form 485BPOS filed on April 23, 2014.)
10.02
10.03 Transfer Agency and Service Agreement as of January 1, 2018, between T. Rowe Price Services, Inc. and the T. Rowe Price Funds. (Incorporated by reference from Form 485BPOS filed on April 26, 2018.)
10.04

Agreement as of January 1, 2018, between T. Rowe Price Retirement Plan Services, Inc. and certain of the T. Rowe Price Funds. (Incorporated by reference from Form 485BPOS filed on April 26, 2018.)

## Table of Contents

| 10.05 |  | Fund Accounting Services Agreement as of August 1, 2015 between T. Rowe Price Associates, Inc. and the T. Rowe Price Funds. (Incorporated by reference from Form 485BPOS filed on April 26, 2018.) |
| :---: | :---: | :---: |
| 10.08 | * | Statements of additional terms and conditions for awards granted under the Amended and Restated 2007 NonEmployee Director Equity Plans after February 12, 2009. (Incorporated by reference from Form 10-Q for the quarterly period ended March 31, 2009 filed on April 22, 2009.) |
| 10.08.1 | * | Amended and Restated 2007 Non-Employee Director Equity Plan. (Incorporated by reference from Form 10-K Annual Report for fiscal year ended December 31, 2015 filed on February 5, 2016.) |
| 10.10 | * | T. Rowe Price Group, Inc. Outside Directors Deferred Compensation Plan. (Incorporated by reference from Form 10-K for 2004 filed on March 1, 2005.) |
| 10.13.1 | * | 2001 Stock Incentive Plan. (Incorporated by reference from Form DEFR14A filed on February 26, 2001.) |
| 10.13.2 | * | First Amendment to 2001 Stock Incentive Plan dated April 8, 2004. (Incorporated by reference from Form DEF 14A filed on February 27, 2004.) |
| 10.13.3 | * | Second Amendment to 2001 Stock Incentive Plan dated December 12, 2008. (Incorporated by reference from Form 10-Q for the quarterly period ended March 31, 2009 filed on April 22, 2009.) |
| 10.14.1 | * | 2004 Stock Incentive Plan. (Incorporated by reference from Form DEF 14A filed on February 27, 2004.) |
| 10.14.2 | * | HM Revenue and Customs Approved Sub-Plan for UK Employees under the 2004 Stock Incentive Plan. (Incorporated by reference from Form 10-Q for the quarterly period ended June 30, 2010 filed on July 23, 2010.) |
| 10.14.3 | * | First Amendment to 2004 Stock Incentive Plan dated December 12, 2008. (Incorporated by reference from Form 10-Q for the quarterly period ended March 31, 2009 filed on April 22, 2009.) |
| 10.15 | * | Forms of agreements available for stock-based awards issued under the 2001 and 2004 Stock Incentive Plans. (Incorporated by reference from Form 10-Q for the quarterly period ended June 30, 2010 filed on July 23, 2010.) |
| 10.15.1 | * | Forms of agreement for stock options issued under the HM Revenue and Customs Approved Sub-Plan for UK Employees under the 2004 Stock Incentive Plan. (Incorporated by reference from Form 10-Q for the quarterly period ended June 30, 2010 filed on July 23, 2010.) |
| 10.15.2 | * | Forms of agreement for stock options issued after February 2, 2012 under the 2004 Stock Incentive Plan. (Incorporated by reference from Form 10-K for 2011 filed on February 3, 2012.) |
| 10.15 .3 | * | Forms of agreement for restricted stock units issued after February 2, 2012 under the 2004 Stock Incentive Plan. (Incorporated by reference from Form 10-K for 2011 filed on February 3, 2012.) |
| 10.15.4 | * | Forms of agreement for restricted stock awards issued after February 2, 2012 under the 2004 Stock Incentive Plan. (Incorporated by reference from Form 10-K for 2011 filed on February 3, 2012.) |
| 10.16 | * | T. Rowe Price Group, Inc. 2018 Annual Incentive Compensation Pool for Executive Officers. (Incorporated by reference from Form 8-K Current Report filed on February 16, 2018). |
| 10.17 |  | Policy for Recoupment of Incentive Compensation. (Incorporated by reference from Form 8-K Current Report as of April 14, 2010 filed on April 16, 2010.) |
| 10.18.1 | * | 2012 Long-term Incentive Plan. (Incorporated by reference from Form DEF14A filed on March 17, 2017) |
| 10.18.2 | * | Forms of agreement for restricted stock awards issued under the 2012 Long-term Incentive Plan. (Incorporated by reference from Form 10-Q Report for the quarterly period ended June 30, 2012 filed on July 25, 2012.) |

## Table of Contents



| 10.23 | 2017 Non-Employee Director Equity Plan (Incorporated by reference from Form S-8 registration statement filed on April 27, 2017.) |
| :---: | :---: |
| 10.23.1 | Statements of additional terms and conditions for awards granted under the 2017 Non-Employee Director Equity Plan (Incorporated by reference from Form S-8 registration statement filed on April 27, 2017.) |
| 10.24 | Consulting Agreement as of December 20, 2018, between T. Rowe Price Group, Inc. and Edward C. Bernard. (Incorporated by reference from Current Report on Form 8-K filed on December 24, 2018.) |
| 10.25 | T. Rowe Price Group, Inc. 2019 Annual Incentive Compensation Plan for Executive Officers. (Incorporated by reference from Form 8-K Current Report filed on February 13, 2019). |
| 21 | Subsidiaries of T. Rowe Price Group, Inc. |
| 23 | Consent of Independent Registered Public Accounting Firm, KPMG LLP. |
| 31(i). 1 | Rule 13a-14(a) Certification of Principal Executive Officer. |
| 31(i). 2 | Rule 13a-14(a) Certification of Principal Financial Officer. |
| 32 | Section 1350 Certifications. |
| 101 | The following series of unaudited XBRL-formatted documents are collectively included herewith as Exhibit 101. The financial information is extracted from T. Rowe Price Group's consolidated financial statements and notes that are included in this Form 10-K Report. |
|  | 101.INS XBRL Instance Document |
|  | 101.SCH XBRL Taxonomy Extension Schema Document |
|  | 101.CAL XBRL Taxonomy Calculation Linkbase Document |
|  | 101.LAB XBRL Taxonomy Label Linkbase Document |
|  | 101.PRE XBRL Taxonomy Presentation Linkbase Document |
|  | 101.DEF XBRL Taxonomy Definition Linkbase Document |

Page 85

SIGNATURES
Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 13, 2019.
T. Rowe Price Group, Inc.

By: /s/ William J. Stromberg, President and Chief Executive Officer
Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 13, 2019.
/s/ Brian C. Rogers, Non-executive Chairman of the Board of Directors
/s/ Edward C. Bernard, Vice Chairman of the Board of Directors
/s/ William J. Stromberg, President and Chief Executive Officer (Principal Executive Officer)
/s/ Mark S. Bartlett, Director
/s/ Mary K. Bush, Director
/s/ Freeman A. Hrabowski III, Director
/s/ Robert F. MacLellan, Director
/s/ Olympia J. Snowe, Director
/s/ Richard R. Verma, Director
/s/ Sandra S. Wijnberg, Director
/s/ Alan D. Wilson, Director
/s/ Céline S. Dufétel, Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)
/s/ Jessica M. Hiebler, Vice President (Principal Accounting Officer)

| Subsidiary companies ${ }^{(1)}$ | Place of incorporation |
| :---: | :---: |
| T. Rowe Price Advisory Services, Inc. | Maryland |
| T. Rowe Price Associates, Inc. | Maryland |
| TRP Suburban, Inc. | Maryland |
| TRP Suburban Second, Inc. | Maryland |
| TRP Colorado Springs, LLC | Maryland |
| TRP Office Florida, LLC | Maryland |
| T. Rowe Price Trust Company | Maryland |
| T. Rowe Price Investment Services, Inc. | Maryland |
| T. Rowe Price Services, Inc. | Maryland |
| T. Rowe Price Retirement Plan Services, Inc. | Maryland |
| T. Rowe Price (Canada), Inc. | Maryland |
| TRPH Corporation | Maryland |
| T. Rowe Price Capital Appreciation \& Income Fund, Inc. | Maryland |
| T. Rowe Price Credit Opportunities Fund, Inc. | Maryland |
| T. Rowe Price Institutional International Funds, Inc. | Maryland |
| T. Rowe Price Quantitative Management Funds, Inc. | Maryland |
| T. Rowe Price Index Trust, Inc. | Maryland |
| T. Rowe Price Multi-Sector Account Portfolios, Inc. | Maryland |
| T. Rowe Price Multi-Strategy Total Return Fund, Inc. | Maryland |
| T. Rowe Price Total Return Fund, Inc. | Maryland |
| T. Rowe Price Intermediate Tax-Free High Yield Fund, Inc. | Maryland |
| T. Rowe Price International Ltd | United Kingdom |
| T. Rowe Price UK Ltd. | United Kingdom |
| T. Rowe Price Hong Kong Limited | Hong Kong |
| T. Rowe Price Singapore Private Ltd. | Singapore |
| T. Rowe Price (Switzerland) GmbH | Switzerland |
| T. Rowe Price (Luxembourg) Management Sarl | Luxembourg |
| T. Rowe Price Japan, Inc. | Japan |
| T. Rowe Price Australia, Ltd. | Australia |

${ }^{(1)}$ Other subsidiaries have been omitted because, when considered in the aggregate, they do not constitute a significant subsidiary.

## CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
T. Rowe Price Group, Inc.:

We consent to the incorporation by reference in the registration statements (No. 33-7012, No. 333-59714, No. 333-120882, No. 333-120883, No. 333-142092, No. 333-167317, No. 333-180904, No. 333-199560, No. 333-212705, and No. 333-217483) on Form S-8 of T. Rowe Price Group, Inc. of our reports dated February 13, 2019, with respect to the consolidated balance sheets of T. Rowe Price Group, Inc. and subsidiaries as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows, for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), and the effectiveness of internal control over financial reporting as of December 31, 2018, which reports appear in the December 31, 2018 annual report on Form 10-K of T. Rowe Price Group, Inc.
/s/ KPMG LLP
Baltimore, MD
February 13, 2019

I, William J. Stromberg, certify that:
1.I have reviewed this Form 10-K Annual Report for the fiscal year ended December 31, 2018 of T. Rowe Price Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d15(f)) for the registrant and have:
(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 13, 2019
/s/ William J. Stromberg
President and Chief Executive Officer

I , Céline S . Dufétel, certify that:
1.I have reviewed this Form 10-K Annual Report for the fiscal year ended December 31, 2018 of T. Rowe Price Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d15(f)) for the registrant and have:
(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 13, 2019
/s/ Céline S. Dufétel
Vice President, Chief Financial Officer and Treasurer

We certify, to the best of our knowledge, based upon a review of the Form 10-K Annual Report for the fiscal year ended December 31, 2018, of T. Rowe Price Group, Inc., that:
(1) The Form 10-K Annual Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934, as amended; and
(2) The information contained in the Form 10-K Annual Report fairly presents, in all material respects, the financial condition and results of operations of T. Rowe Price Group, Inc.

February 13, 2019
/s/ William J. Stromberg
President and Chief Executive Officer
/s/ Céline S. Dufétel
Vice President, Chief Financial Officer and Treasurer

