

Q3 | 2023

Putnam Equities

Pursuing alpha with active strategies

Seeking performance through fundamental research Controlling factor risks to help manage volatility



Putnam Investments

Putnam is a global money management firm serving institutions worldwide. Helping clients pursue their financial goals is our sole business. We offer investment solutions across a range of asset classes, strategies, and vehicles. With over 85 years of service, Putnam manages \$166 billion for clients as of September 30, 2023.

Our investment division comprises 190 investment professionals across three interconnected organizations — Equities, Fixed Income, and Global Asset Allocation. Each is staffed with portfolio managers, analysts, and traders covering fundamental and quantitative disciplines. Together, these professionals create a diverse, collaborative, and inclusive culture designed to pursue alpha for our clients. A commitment to active strategies driven by proprietary research, rigorous risk management, and client-centered innovation distinguishes our investment approach.

Putnam's global presence includes offices in Boston, London, Munich, Singapore, Sydney, and Tokyo.

Our diverse mix of clients encompasses public and corporate pensions, endowments and foundations, sovereigns, and family offices. We offer a broad spectrum of actively managed strategies, including long-only and alternatives, in custom segregated accounts and pooled vehicles.









A commitment to active strategies driven by proprietary research, rigorous risk management, and client-centered innovation defines our investment approach.



All data as of September 30, 2023. Total assets are unaudited and subject to change and do not reflect pending activity for client decisions communicated to Putnam as of September 30, 2023.

For use with institutional investors and investment professionals only.

An equities organization built to pursue alpha

Our equities organization offers strategies that pursue alpha through deep fundamental research and portfolio construction designed to maximize stock-specific insights and manage downside risk. Our broad array of equity capabilities includes specialized value, core, and growth strategies across U.S. large, mid, and small caps as well as global, non-U.S., and emerging markets. In 2017, we expanded our platform to include dedicated sustainable investment solutions. We intend for each of our strategies to be best in class and difficult to replicate.

We have developed a distinctive, team-based research culture to generate differentiated investment insights. Our flat organization encourages collaboration and information flow across our portfolio managers and research analysts.

Research dialogue and debate benefit from the diverse perspectives and backgrounds of our team members. Approximately 40% of our portfolio managers and 60% of our analyst team are women and/or people of color.

High standards and trust are essential elements of our team ethos. Reinforcing trust and collaboration in our team culture, we reward individuals for contributing to group performance. This practice contributes to long tenures among our portfolio managers and analysts. In turn, the seasoned experience of our professionals, combined with our multiyear investment horizon, helps foster deep relationships with company management.

PUTNAM EQUITIES ORGANIZATION



Shep Perkins, CFA Chief Investment Officer, Equities



Kathryn B. Lakin Director of Equity Research



Katherine Collins, CFA, MTS Head of Sustainable Investing



Marc Lindquist Head of Equity Trading

KEY ATTRIBUTES

\$67B Equity assets under management worlds

management worldwide

Average years of investment experience for portfolio managers and analysts

Portfolio managers and analysts based in Boston, London, and Singapore

Average years of investment experience for senior team leaders

All data as of September 30, 2023. Actual results could be materially different from the stated goals. Investors should carefully consider the risks involved before deciding to invest. As with any investment, there is a potential for profit as well as the possibility of loss.

A philosophy emphasizing stock-specific opportunities

We aim to deliver mandates that outperform their stated benchmarks over multiyear periods with less of the market's downside volatility. Our intent is to amplify the impact of idiosyncratic risk while reducing common factor risks, especially those that have historically detracted from performance in down markets.

While we embrace a variety of investment disciplines, our offerings adhere to key tenets covering portfolio construction, risk management, collaboration, and ESG insights. These beliefs align our work with our clients' objectives and seek to produce a better overall investment experience regardless of market environment.

We believe

Portfolios driven more by stock-specific exposures than by common factor risks are better able to consistently generate alpha and manage downside risk.

Incorporating context-relevant and financially material environmental, social, and governance (ESG) insights as part of our fundamental framework enhances our overall analysis and improves portfolio outcomes. Portfolio managers are more successful when they have individual accountability while collaborating with a well-resourced, diverse research team built to maximize sector and strategy expertise.

A compensation structure tying investment performance to alpha, risk management, and team collaboration aligns our incentives with the interests of our clients.

We adhere to the key tenets of our philosophy that seeks to produce a better investment experience for our clients.

As part of our investment analysis, depending on the strategy or portfolio in question, we may integrate environmental, social, or governance (ESG) issues or considerations into our research and/or investment decision-making. In our view, analysis of ESG issues is part of good investing, as these issues, like other, more traditional areas of investment analysis, such as market position, growth prospects, and business strategy, have the potential to impact risk and returns. The relevance and materiality of other ESG issues in our process will differ from strategy to strategy, from sector to sector, and from portfolio manager to portfolio manager, and for some strategies, most notably those where we lack relevant ESG data, ESG considerations are not a material part of our process. It is also important to note that consideration of ESG issues does not mean that a particular account pursues a specific "ESG" or "sustainable" investment strategy, and depending on the strategy, we sometimes make investment decisions notwithstanding the associated ESG considerations. Actual results could be materially different from the stated goals. As with any investment, there is a potential for profit as well as the possibility of loss.

For use with institutional investors and investment professionals only.

An investment process fueled by fundamental research

We designed our investment process to help ensure the primary driver of strategy performance is stock selection. One or two lead portfolio managers typically are responsible for each strategy, reflecting our firmwide emphasis on individual accountability. The managers collaborate with research analysts in a process that generates conviction both to invest in an idea and to determine its appropriate size.

Hybrid equity research

Analysts are responsible for developing investment recommendations by assessing the importance of a wide range of inputs. We believe Putnam's hybrid model, where analysts specialize either as strategy experts or sector experts, supports more efficient collaboration and dialogue around investment ideas. It also allows analysts to devote extra time to high-conviction ideas, in contrast to a model requiring the same research time for each company under coverage.

Strategy experts focus on the needs of a specific equity strategy and incorporate its attributes in their approach to researching companies. Strategy analysts also contribute to investment decisions, portfolio construction, and risk management. Approximately one third of analysts are strategy experts.

Sector experts master the details of specific industries. Many leverage a decade or more of experience analyzing companies in a sector. Their role is critical in helping to determine positions for strategies that have relatively greater exposure to the industries they cover and in helping portfolio managers and analysts evaluate companies that compete across sectors. Approximately two thirds of the analysts have a sector focus.

Collaborating with different specialties in this hybrid model, the analysts produce unique insights with deeper research conviction.

Integrated ESG research

Our Sustainable Equity team is central to the work of our Equities organization, and we embed ESG analysis in the fundamental research that drives all of our strategies. Leveraging our deep understanding of the key performance drivers of individual companies, our sustainability research focuses on the relevant, financially material issues specific to each stock.

Multiple resources

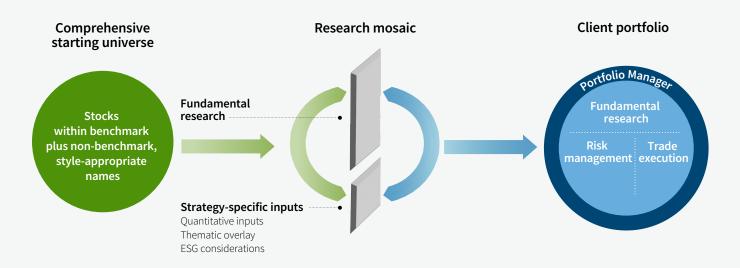
To form an investment view on a company, our analysts use a variety of resources and tools beyond publicly available filings. We host thousands of meetings each year with corporate management teams and discussions with suppliers and customers. Our approach is robust and iterative. Reflecting our long-term view on the markets, our intensive research continues even after divestment.

We support independent views and reward analysts for bringing unique perspectives to the stocks they analyze. We encourage them to spend more time developing insights on companies they believe will have the greatest impact on portfolios, and to collaborate with fellow analysts to share and discuss information. This approach empowers them to look outside the stocks listed in their benchmark if they believe it may uncover new opportunities.

In our view, analysis of ESG issues is part of good investing, as these issues, like other, more traditional areas of investment analysis, such as market position, growth prospects, and business strategy, have the potential to impact risk and returns. The relevance and materiality of other ESG issues in our process will differ from strategy to strategy, from sector to sector, and from portfolio manager to portfolio manager.

Rigorous research and debate

The culture driving our investment process prizes collaboration through continuous formal and informal communication. In group meetings and stock pitches, analysts and portfolio managers present investment ideas, solicit feedback, and hear the views of colleagues. Respectful debate rather than consensus agreement arrives at a more thorough assessment of a potential opportunity or risk.



For illustrative purposes only.

Communicating conviction

Analysts are also responsible for managing sector sleeves that contain their highest-conviction ideas, weighted with consideration for appropriate sizing, time horizon, and correlation with other holdings. These sleeves serve as a unique communication vehicle within the team to signal each analyst's best ideas to the broader group. A part of analysts' compensation is directly tied to the performance of the portfolio sleeve as motivation for differentiated, stock-specific insights.

A range of capabilities

Our robust process for efficiently generating differentiated insights means that our Equities organization can offer a wide range of investment options. Equity capabilities include U.S. and non-U.S. strategies specialized in sustainability, developed and emerging markets, investment style, market capitalization, and/or industry sector. See the following pages for specific strategy offerings and performance information.

Risk management integrated with research conviction

Prudent risk management is a key component of our overall equity investment process. We construct and modify portfolios according to each client's mandated investment objectives and guidelines, drawing on insights from our fundamental research team.

Portfolio managers use multiple quantitative tools to develop a deep understanding of risk. We believe individual quantitative models can have flaws or blind spots. Using several models collectively enables our portfolio managers to more effectively identify exposures and to allocate active risk where they have conviction by controlling for common factor risks and maximizing stock-specific opportunities.

To construct portfolios, managers collaborate with analysts to determine which top research ideas may be appropriate for portfolios and to direct and conduct further research. The portfolio managers also work closely with Putnam's quantitative analysts and risk management specialists to maintain portfolio positioning that adheres to client objectives and risk tolerances.

We measure the success of our investment and risk management efforts in our ability to deliver alpha and sustain multiyear relationships with the institutions we serve.

Use of models and analytical, quantitative, and risk management tools and techniques is no guarantee of investment success or positive performance. These models are dynamic, and as a result, the variables or factors or components may change over time.

COMPOSITE PERFORMANCE (AS OF SEPTEMBER 30, 2023)

U.S. equity strategies

U.S. Large Cap Growth Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-4.04%	26.30%	28.51%	5.87%	12.56%	15.06%
Net	-4.17	25.78	27.81	5.29	11.94	14.39
Russell 1000® Growth Index	-3.13	24.98	27.72	7.97	12.42	14.48
Relative return (gross)	-0.91	1.32	0.79	-2.10	0.14	0.58
Relative return (net)	-1.04	0.80	0.09	-2.68	-0.48	-0.09

Composite inception: January 31, 2009.

U.S. Large Cap Growth Equity Concentrated	Q3 2023	YTD	1 year	3 years	5 years	Since inception
Gross	-4.38%	25.79%	26.13%	4.71%	12.40%	16.02%
Net	-4.51	25.27	25.43	4.18	11.90	15.53
Russell 1000 Growth Index	-3.13	24.98	27.72	7.97	12.42	15.23
Relative return (gross)	-1.25	0.81	-1.59	-3.26	-0.02	0.79
Relative return (net)	-1.38	0.29	-2.29	-3.79	-0.52	0.30

Composite inception: March 31, 2017.

U.S. Small Cap Growth Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-4.16%	11.58%	16.12%	4.91%	9.23%	11.25%
Net	-4.35	10.91	15.19	4.07	8.35	10.31
Russell 2000® Growth Index	-7.32	5.24	9.59	1.09	1.55	6.72
Relative return (gross)	3.16	6.34	6.53	3.82	7.68	4.53
Relative return (net)	2.97	5.67	5.60	2.98	6.80	3.59

Composite inception: January 31, 2000.

U.S. Large Cap Value Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-1.31%	6.22%	19.31%	15.37%	9.85%	11.13%
Net	-1.45	5.78	18.65	14.74	9.25	10.51
Russell 1000 Value Index	-3.16	1.79	14.44	11.05	6.23	8.45
Relative return (gross)	1.85	4.43	4.87	4.32	3.62	2.68
Relative return (net)	1.71	3.99	4.21	3.69	3.02	2.06

Composite inception: December 31, 1992.

U.S. Large Cap Value Equity Concentrated	Q3 2023	YTD	1 year	3 years	5 years	Since inception
Gross	-0.35%	8.62%	23.56%	19.13%	11.46%	12.96%
Net	-0.49	8.17	22.88	18.54	11.00	12.52
Russell 1000 Value Index	-3.16	1.79	14.44	11.05	6.23	7.49
Relative return (gross)	2.81	6.83	9.12	8.08	5.23	5.47
Relative return (net)	2.67	6.38	8.44	7.49	4.77	5.03

Composite inception: November 30, 2016.

U.S. Small Cap Value Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	0.00%	7.08%	16.13%	21.32%	6.12%	8.17%
Net	-0.20	6.43	15.20	20.35	5.27	7.28
Russell 2000 Value Index	-2.96	-0.53	7.84	13.32	2.59	6.19
Relative return (gross)	2.96	7.61	8.29	8.00	3.53	1.98
Relative return (net)	2.76	6.96	7.36	7.03	2.68	1.09

Composite inception: March 31, 1993.

U.S. Research	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-2.23%	15.76%	25.55%	10.84%	11.35%	12.94%
Net	-2.37	15.28	24.86	10.23	10.74	12.27
S&P 500® Index	-3.27	13.07	21.62	10.15	9.92	11.91
Relative return (gross)	1.04	2.69	3.93	0.69	1.43	1.03
Relative return (net)	0.90	2.21	3.24	0.08	0.82	0.36

Composite inception: October 31, 1995.

Global/Non-U.S. equity strategies

Non-U.S. Value Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-1.10%	11.84%	35.80%	13.92%	6.19%	4.98%
Net	-1.29	11.20	34.76	13.05	5.38	4.13
MSCI EAFE Value Index (ND)	0.59	9.92	31.51	11.11	2.81	2.97
Relative return (gross)	-1.69	1.92	4.29	2.81	3.38	2.01
Relative return (net)	-1.88	1.28	3.25	1.94	2.57	1.16

Composite inception: August 31, 1996.

Non-U.S. Core Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-3.16%	9.12%	28.13%	6.19%	4.73%	4.80%
Net	-3.34	8.52	27.18	5.40	3.96	4.02
MSCI EAFE Index (ND)	-4.11	7.08	25.65	5.75	3.24	3.82
Relative return (gross)	0.95	2.04	2.48	0.44	1.49	0.98
Relative return (net)	0.77	1.44	1.53	-0.35	0.72	0.20

Composite inception: December 31, 1986.

Non-U.S. Small Cap Equity	Q3 2023	YTD	1 year	3 years	5 years	Since inception
Gross	-3.50%	3.86%	27.61%	6.36%	4.28%	6.81%
Net	-3.72	3.13	26.42	5.36	3.32	5.85
S&P Developed Ex-U.S. SmallCap Index	-3.69	2.95	19.80	1.57	1.05	4.67
Relative return (gross)	0.19	0.91	7.81	4.79	3.23	2.14
Relative return (net)	-0.03	0.18	6.62	3.79	2.27	1.18
MSCI EAFE Small Cap Index	-3.51	1.82	17.90	1.11	0.76	4.48
Relative return (gross)	0.01	2.04	9.71	5.25	3.52	2.33
Relative return (net)	-0.21	1.31	8.52	4.25	2.56	1.37

Composite inception: March 31, 2016.

Emerging Markets Equity	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-4.41%	3.85%	14.06%	-4.78%	2.89%	4.58%
Net	-4.65	3.07	12.92	-5.69	1.92	3.58
MSCI Emerging Markets Index (ND)	-2.93	1.82	11.70	-1.73	0.55	2.07
Relative return (gross)	-1.48	2.03	2.36	-3.05	2.34	2.51
Relative return (net)	-1.72	1.25	1.22	-3.96	1.37	1.51

Composite inception: July 31, 1997.

Emerging Markets Small Cap Equity	Q3 2023	YTD	1 year	3 years	Since inception
Gross	5.64%	25.17%	31.80%	7.09%	13.45%
Net	5.43	24.47	30.81	6.29	12.60
MSCI Emerging Markets Small Cap Index	2.93	13.74	23.06	10.61	8.68
Relative return (gross)	2.71	11.43	8.74	-3.52	4.77
Relative return (net)	2.50	10.73	7.75	-4.32	3.92

Composite inception: May 31, 2019.

Global Health Care	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-1.02%	1.89%	16.41%	8.75%	10.43%	11.48%
Net	-1.17	1.42	15.70	8.08	9.76	10.76
MSCI World Health Care Index (ND)	-2.76	-2.00	10.88	5.86	7.07	9.32
Relative return (gross)	1.74	3.89	5.53	2.89	3.36	2.16
Relative return (net)	1.59	3.42	4.82	2.22	2.69	1.44

Composite inception: August 31, 1993.

Global Technology	Q3 2023	YTD	1 year	3 years	5 years	10 years
Gross	-6.20%	31.64%	39.68%	7.08%	15.89%	19.81%
Net	-6.39	30.85	38.56	6.23	15.06	18.97
MSCI ACWI Information Technology Index (ND)	-6.16	28.47	35.88	9.13	14.99	17.43
Relative return (gross)	-0.04	3.17	3.80	-2.05	0.90	2.38
Relative return (net)	-0.23	2.38	2.68	-2.90	0.07	1.54

Composite inception: January 31, 2009.

Sustainable equity strategies

Global Sustainable	Q3 2023	YTD	1 year	Since inception
Gross	-3.83%	9.13%	20.50%	-3.56%
Net	-3.97	8.68	19.84	-4.09
MSCI World Index (ND)	-3.46	11.10	21.95	0.37
Relative return (gross)	-0.37	-1.97	-1.45	-3.93
Relative return (net)	-0.51	-2.42	-2.11	-4.46

Composite inception: April 30, 2021.

Sustainable Future	Q3 2023	YTD	1 year	3 years	5 years	Since inception
Gross	-4.25%	10.70%	13.18%	-2.47%	6.39%	8.31%
Net	-4.41	10.17	12.46	-3.08	5.76	7.67
Russell Midcap® Growth Index	-5.22	9.88	17.47	2.61	6.97	8.35
Relative return (gross)	0.97	0.82	-4.29	-5.08	-0.58	-0.04
Relative return (net)	0.81	0.29	-5.01	-5.69	-1.21	-0.68

Composite inception: November 30, 2017.

Sustainable Leaders	Q3 2023	YTD	1 year	3 years	5 years	Since inception
Gross	-3.49%	11.63%	18.45%	6.46%	10.79%	12.04%
Net	-3.63	11.14	17.75	5.84	10.16	11.40
S&P 500 Index	-3.27	13.07	21.62	10.15	9.92	11.14
Relative return (gross)	-0.22	-1.44	-3.17	-3.69	0.87	0.90
Relative return (net)	-0.36	-1.93	-3.87	-4.31	0.24	0.26

Composite inception: March 31, 2018.

Past performance is not a guarantee of future results. An investment in these strategies can lose value.

Periods less than one year are not annualized. Performance is stated in U.S. dollars and includes the reinvestment of dividends and interest. Gross performance includes the deduction of transaction costs but does not include the deduction of management fees and other expenses that may be incurred in managing an investment account. A portfolio's return will be reduced by advisory and other fees. Net performance reflects the deduction of a model fee, equal to the actual management fee incurred by a portfolio in the composite or the highest management fee charged to a prospect of the strategy, whichever is higher. Actual advisory fees may vary among clients with the same investment strategy. A composite includes all actual, fully discretionary accounts with substantially similar investment policies and objectives managed to the composite's investment strategy.

^{*} Since April 1, 2022, the Composite's benchmark is the MSCI ACWI Information Technology Index (ND). From inception to March 31,2022, the Composite's benchmark was the MSCI World Information Technology Index (ND).

BOSTON SINGAPORE

LONDON SYDNEY

MUNICH TOKYO

Putnam Investments 100 Federal Street Boston, MA 02110 Phone: 617-292-1000 Putnam Investments Limited 16 St. James's Street London, SW1A 1ER Phone: +44 (0) 207 907 8200 Putnam Investments Limited Theatinerstraße 11 80333 München, Germany Phone: +49 (0) 89 5419 8727

Contact Putnam to learn how our equity capabilities can help your institution pursue its financial goals.

This communication is prepared for use with institutional investors and investment professionals and is provided for limited purposes. By receiving and reviewing this material, the recipient acknowledges the following: This material is a general communication being provided for informational and educational purposes only. It is not designed to be a recommendation of any specific investment product, strategy, or decision, and is not intended to suggest taking or refraining from any course of action. The material was not prepared, and is not intended, to address the needs, circumstances, and objectives of any specific institution, plan, or individual(s). Putnam is not providing advice in a fiduciary capacity under applicable law in providing this material, which should not be viewed as impartial, because it is provided as part of the general marketing and advertising activities of Putnam, which earns fees when clients select its products and services. The views and strategies described herein may not be suitable for all investors. Prior to making any investment or financial decisions, any recipients of this material should seek individualized advice from their personal financial, legal, tax, and $other professional \, advisors \, that \, takes \, into \, account \, all \, of \, the \, particular facts \, and \,$ $circumstances \, of their situation. \, Unless \, otherwise \, noted, Putnam \, is \, the \, source$ of all data. Information and data contained in this material are subject to change. Actual results could differ materially from those anticipated. Predictions, opinions, and other information contained in this material are subject to change. Any forward-looking statements speak only as of the date they are made, and Putnam assumes no duty to update them. Forward-looking statements are subject to numerous assumptions, risks, and uncertainties. Actual results could differ materially from those anticipated. All investments involve risk, and investment recommendations will not always be profitable. Putnam Investments does not guarantee any minimum level of investment performance or the success of any investment strategy. Past performance is no guarantee of future results. This material may not be reprinted, sold, or redistributed in whole or in part without the express written consent of Putnam Investments. The information provided relates to Putnam Investments and its affiliates, which include The Putnam Advisory Company, LLC and Putnam Investments Limited®.

Issued in the United Kingdom by Putnam Investments Limited®. Putnam Investments Limited is authorized and regulated by the Financial Conduct Authority (FCA). For the activities carried out in Germany, the German branch of Putnam Investments Limited holds a permit as a financial investment broker in accordance with Sec. 34f para. 1 sentence no. 1 of the German Trade Ordinance and is registered under the registration number D-F-16077N8-19 in the publicly available broker register. Putnam Investments Limited is also permitted to provide cross-border investment services to certain EEA member states. In Europe, this material is directed exclusively at professional clients and eligible counterparties (as defined under the FCA Rules, or the German Securities Trading Act (Wertpapierhandelsgesetz) or other applicable law) who are knowledgeable and experienced in investment matters. Any investments to which this material relates are available only to or will be engaged in only with such persons, and any other persons (including retail clients) should not act or rely on this material. Furthermore, this material is only intended for the recipient receiving it directly $from \, Putnam \, Investments \, Limited \, and \, should \, not \, be \, forwarded \, to, \, or \, relied \,$ upon by, the recipient's underlying clients.

Prepared for use with wholesale investors in Australia by Putnam Investments Australia Pty Limited, ABN 50 105 178 916, AFSL No. 247032. This material has been prepared without taking account of an investor's objectives, financial situation and needs. Before deciding to invest, investors should consider whether the investment is appropriate for them.

Prepared for use in Canada by Putnam Investments Canada ULC (o/a Putnam Management in Manitoba). Where permitted, advisory services are provided in Canada by Putnam Investments Canada ULC (o/a Putnam Management in Manitoba) and its affiliate, The Putnam Advisory Company, LLC.

This material is prepared by Putnam Investments for use in Japan by Putnam Investments Japan Co., Ltd. ("Putnam Japan"), and is for Professional Investors defined in Article 2, Paragraph 31 of the Financial Instruments and Exchange Act of Japan ("Tokutei-toshika") (including financial instruments business operators or registered financial institutions engaged in the investment management business provided for in Article 61, Paragraphs 1 and 2 of the said Act). Putnam Japan is registered with Kanto Local Finance Bureau in Japan as a financial instruments business operator conducting the investment advisory and agency business, and is a member of Japan Investment Advisers Association. This material is prepared for informational purposes only, and is not intended as a solicitation to invest in any securities or other financial product in Japan, or to enter into with Putnam Japan an investment advisory contract or a discretionary investment management contract in Japan.

Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Russell $^{\circ}$ is a trademark of Frank Russell Company.

Certain information contained herein (the "Information") is sourced from/copyright of MSCI Inc., MSCI ESG Research LLC, or their affiliates ("MSCI"), or information providers (together the "MSCI Parties") and may have been used to calculate scores, signals, or other indicators. The Information is for internal use only and may not be reproduced or disseminated in whole or part without prior written permission. The Information may not be used for, nor does it constitute, an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product, trading strategy, or index, nor should it be taken as an indication or guarantee of any future performance. Some funds may be based on or linked to MSCI indexes, and MSCI may be compensated based on the fund's assets under management or other measures. MSCI has established an information barrier between index research and certain Information. None of the Information in and of itself can be used to determine which securities to buy or sell or when to buy or sell them. The Information is provided "as is" and the user assumes the entire risk of any use it may make or permit to be made of the Information. No MSCI Party warrants or guarantees the originality, accuracy, and/or completeness of the Information, and each expressly disclaims all express or implied warranties. No MSCI Party shall have any liability for any errors or omissions in connection with any Information herein, or any liability for any direct, indirect, special, punitive, consequential, or any other damages (including lost profits) even if notified of the possibility of such damages.

A world of investing.

