

2018 year-end distributions estimates as of 10/31/18



Putnam fund name	Ex-div date (est.)	Pay date (est.)	Capital gains						Extra taxable income per share \$	Per-share \$ total
			Low estimate % of NAV	High estimate % of NAV	Low distribution per share \$	High distribution per share \$	Short term per share \$	Long term per share \$		
AMT-Free Municipal Fund	12/27/18	12/31/18	0%	2%	\$0.01	\$0.30	\$0.0000	\$0.1573	\$0.0036	\$0.1609
California Tax Exempt Income Fund	12/27/18	12/31/18	0	2	0.00	0.16	0.0000	0.0770	0.0061	0.0831
Convertible Securities Fund	12/26/18	12/28/18	9	11	2.25	2.76	0.0890	2.4170	0.0000	2.5060
Dynamic Asset Allocation Balanced Fund	12/18/18	12/20/18	5	7	0.74	1.04	0.1600	0.7300	0.0000	0.8900
Dynamic Asset Allocation Conservative Fund	12/18/18	12/20/18	2	4	0.17	0.38	0.0000	0.2740	0.0000	0.2740
Dynamic Asset Allocation Growth Fund	12/18/18	12/20/18	7	9	1.11	1.44	0.2620	1.0150	0.1790	1.4560
Dynamic Risk Allocation Fund	12/18/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.1950	0.1950
Emerging Markets Equity Fund	12/21/18	12/26/18	1	3	0.11	0.33	0.0000	0.2170	0.0140	0.2310
Equity Income Fund	12/26/18	12/28/18	3	5	0.75	1.24	0.1600	0.8360	0.0000	0.9960
Europe Equity Fund	12/21/18	12/28/18	0	0	0.00	0.00	0.0000	0.0000	0.4510	0.4510
Fixed Income Absolute Return Fund	12/18/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.0820	0.0820
George Putnam Balanced Fund	11/28/18	11/30/18	6	8	1.10	1.47	0.2970	0.9860	0.0000	1.2830
Global Communications Fund*	12/21/18	12/26/18	1	3	0.16	0.46	0.0000	0.3120	0.1100	0.4220
Global Consumer Fund	12/21/18	12/26/18	5	7	1.17	1.60	0.0000	1.3830	0.0000	1.3830
Global Financials Fund	12/21/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.2210	0.2210
Global Health Care Fund	12/21/18	12/26/18	5	7	2.54	3.59	0.4770	2.5880	0.0390	3.1040
Global Industrials Fund	12/21/18	12/26/18	6	8	1.26	1.68	0.0000	1.4710	0.0000	1.4710
Global Natural Resources Fund	12/21/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.0980	0.0980
Global Technology Fund	12/21/18	12/26/18	6	8	2.23	2.93	1.4340	1.1460	0.0760	2.6560
Global Utilities Fund	12/26/18	12/28/18	9	11	1.27	1.54	0.0000	1.4030	0.0000	1.4030
Growth Opportunities Fund	12/06/18	12/10/18	6	8	2.03	2.72	0.0000	2.3760	0.0130	2.3890
Intermediate-Term Municipal Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0051	0.0051
International Capital Opportunities Fund	12/21/18	12/26/18	7	9	2.76	3.51	0.0000	3.1360	0.0000	3.1360
International Equity Fund	12/21/18	12/26/18	4	6	0.93	1.38	0.0000	1.1550	0.1750	1.3300
International Value Fund	12/21/18	12/26/18	1	3	0.11	0.32	0.0000	0.2160	0.2150	0.4310
Managed Municipal Income Trust	12/21/18	01/02/19	0	0	0.00	0.00	0.0000	0.0000	0.0101	0.0101
Massachusetts Tax Exempt Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0074	0.0074
Minnesota Tax Exempt Income Fund	12/27/18	12/31/18	0	1	0.00	0.10	0.0000	0.0057	0.0000	0.0057
Mortgage Opportunities Fund	12/18/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.5810	0.5810
Multi-Asset Absolute Return Fund	12/18/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.3850	0.3850
Multi-Cap Core Fund	12/06/18	12/10/18	0	1	0.00	0.28	0.0030	0.0470	0.0000	0.0500
Municipal Opportunities Trust	12/21/18	01/02/19	0	2	0.06	0.40	0.0000	0.2297	0.0232	0.2529
New Jersey Tax Exempt Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0117	0.0117
New York Tax Exempt Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0015	0.0015
Ohio Tax Exempt Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0013	0.0013
Pennsylvania Tax Exempt Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0089	0.0089
Putnam PanAgora Managed Futures Strategy	12/24/18	12/27/18	0	0	0.00	0.00	0.0000	0.0000	0.2350	0.2350
Putnam PanAgora Risk Parity Fund	12/24/18	12/27/18	0	0	0.00	0.00	0.0000	0.0000	0.0850	0.0850
Research Fund	12/06/18	12/10/18	11	13	3.68	4.36	1.2780	2.7440	0.1230	4.1450
Retirement Income Fund Lifestyle 1	12/26/18	12/28/18	0	1	0.00	0.20	0.0000	0.0280	0.2270	0.2550

* Putnam Global Telecommunications Fund was renamed Putnam Global Communications Fund, effective November 30, 2018.

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Short Duration Bond Fund	12/21/18	12/26/18	0%	0%	\$0.00	\$0.00	\$0.0000	\$0.0000	\$0.0710	\$0.0710
Short Duration Income Fund	12/27/18	12/31/18	0	1	0.00	0.10	0.0009	0.0008	0.0000	0.0017
Short Term Municipal Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0022	0.0022
Small Cap Value Fund	12/06/18	12/10/18	12	14	1.56	1.82	1.4260	0.2650	0.3170	2.0080
Sustainable Future Fund	12/06/18	12/10/18	20	22	4.04	4.44	0.0860	4.1560	0.2180	4.4600
Sustainable Leaders Fund	12/06/18	12/10/18	15	17	14.11	16.01	1.6090	13.4520	0.0520	15.1130
Tax Exempt Income Fund	12/27/18	12/31/18	0	1	0.00	0.10	0.0000	0.0190	0.0207	0.0397
Tax-Free High Yield Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0242	0.0242
No estimated extra taxable distribution required										
Capital Spectrum Fund	12/06/18	12/10/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Diversified Income Trust	12/14/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Equity Spectrum Fund	12/06/18	12/10/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Floating Rate Income Fund	12/27/18	12/31/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Global Equity Fund	12/21/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Global Income Trust	12/21/18	12/28/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
High Yield Fund	12/19/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Income Fund	12/19/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
International Growth Fund	12/21/18	12/26/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Master Intermediate Income Trust	12/21/18	01/02/19	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Mortgage Securities Fund	12/14/18	12/20/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Premier Income Trust	12/21/18	01/02/19	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000
Putnam PanAgora Market Neutral Fund	12/24/18	12/27/18	0	0	0.00	\$0.00	0.0000	0.0000	0.0000	0.0000
Small Cap Growth Fund	12/06/18	12/10/18	0	0	0.00	0.00	0.0000	0.0000	0.0000	0.0000

Estimated capital gains distributions of class A shares were calculated based on book figures and are subject to change from month to month. Estimates were calculated based upon partial-year fund performance, and distributions for other classes of shares may vary. These figures are only guidelines. Actual year-end distributions may be substantially higher or lower due to market volatility, changes in fund holdings, or other factors.

Ex-dividend and pay dates are subject to Trustee approval.

This information is not meant as tax or legal advice. Please consult with the appropriate tax or legal professional regarding your particular circumstances before making any investment decisions. Putnam does not provide tax or legal advice.

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Putnam Retail Management

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