December 1, 2025
Putnam Investment Funds

Fund	Ticker Symbol					
	Class A	Class C	Class R	Class R5	Class R6	Class Y
Putnam Large Cap Growth Fund ("Large Cap Growth Fund")	POGAX	POGCX	PGORX	PGODX	PGOEX	PGOYX
Putnam U.S. Research Fund ("U.S. Research Fund")	PNRAX	PRACX	PRSRX	N/A	PLJMX	PURYX

STATEMENT OF ADDITIONAL INFORMATION

This Statement of Additional Information ("SAI") is not a prospectus. If the Fund has more than one form of current prospectus, each reference to the prospectus in this SAI includes all of the Fund's prospectuses, unless otherwise noted. The SAI should be read together with the applicable prospectus. The audited financial statements and report of the Fund's independent registered public accounting firm in the Fund's Form N-CSR, for the fiscal year ended July 31, 2025, are incorporated by reference into this SAI, which means that they are part of this SAI for legal purposes.

Part I of this SAI contains specific information about each Fund listed above (references to the "Fund" mean each Fund listed on this cover page, unless otherwise noted). Part II includes information about the Fund and other Putnam mutual funds and exchange-traded funds (collectively, the "Putnam funds").

For a free copy of the Fund's current prospectus, shareholder reports, and/or financial statements, call Putnam Investor Services at 1-800-225-1581, write P.O. Box 219697, Kansas City, MO 64121-9697 or visit www.franklintempleton.com.

PGOF-P5 04/26

PUTNAM INVESTMENT FUNDS
PUTNAM VARIABLE TRUST
SUPPLEMENT DATED APRIL 17, 2026 TO THE SUMMARY PROSPECTUS, PROSPECTUS AND STATEMENT OF ADDITIONAL INFORMATION ("SAI") OF EACH FUND LISTED IN SCHEDULE A

All changes described below are effective April 30, 2026.

I. **The following is added to the sections titled "Your fund's management – Portfolio managers" and "Fund summary – Your fund's management – Portfolio managers" in the Summary Prospectus and Prospectus, respectively, of each fund listed in Schedule A:**

Robert Gray
Portfolio Manager of Putnam Management and portfolio manager of the fund since April 2026.

II. **The following is added to the section titled "Who oversees and manages the fund? – Portfolio managers" in the Prospectus of each fund listed in Schedule A:**

Robert Gray, Portfolio Manager of Putnam Management
Mr. Gray has been a portfolio manager of the fund since April 2026. He joined Putnam Management in 2018.

III. **The following is added to the table in the section titled "PORTFOLIO MANAGERS – Other Accounts Managed by the Portfolio Managers" in the SAI of each fund listed in Schedule A:**

Portfolio Manager	Type of Account	Number of Accounts Managed	Total Assets Managed (Millions) ($)	Number of Accounts Managed for which Advisory Fee is Performance - Based	Assets Managed for which Advisory Fee is Performance - Based (Millions) ($)
Robert Gray*	Registered Investment Companies	1	716.30	None	None
	Other Pooled Investment Vehicles	None	None	None	None
	Other Accounts	1	0.04	None	None

*Information provided as of February 28, 2026.

IV. The following is added to the table in the section titled "PORTFOLIO MANAGERS – Portfolio managers' securities ownership" in Putnam U.S. Research Fund's SAI:

Portfolio Managers	Dollar Range of Ownership of Securities ($)
Robert Gray*	1 – 10,000

*Information provided as of April 15, 2026.

SCHEDULE A

Fund	Date of Summary Prospectus, Prospectus and SAI
Putnam Investment Funds	
Putnam U.S. Research Fund	December 1, 2025

Putnam Variable Trust

Putnam VT Research Fund May 1, 2025

Shareholders should retain this Supplement for future reference.

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SAI

PART I

FUND ORGANIZATION AND CLASSIFICATION

U.S. Research Fund is a diversified series of Putnam Investment Funds, a Massachusetts business trust organized on October 31, 1994 (the "Trust"). A copy of the Trust's Amended and Restated Agreement and Declaration of Trust (the "Agreement and Declaration of Trust"), which is governed by Massachusetts law, is on file with the Secretary of The Commonwealth of Massachusetts. Large Cap Growth Fund is a non-diversified series of the Trust. Prior to September 30, 2025, U.S. Research Fund was known as Putnam Research Fund and prior to March 31, 2023, Large Cap Growth Fund was known as Putnam Growth Opportunities Fund.

The Trust is an open-end management investment company with an unlimited number of authorized shares of beneficial interest. The Trustees may, without shareholder approval, create two or more series of shares representing separate investment portfolios. Any series of shares may be divided without shareholder approval into two or more classes of shares having such preferences and special or relative rights and privileges as the Trustees determine. The Fund offers classes of shares with different sales charges and expenses.

Each share has one vote, with fractional shares voting proportionally.

Shares of all series and classes will vote together as a single class on all matters except (i) when required by the Investment Company Act of 1940, as amended, or when the Trustees have determined that a matter affects one or more series or classes materially differently, shares are voted by individual series or class; and (ii) when the Trustees determine that such a matter affects only the interests of a particular series or class, then only shareholders of that series or class are entitled to vote. The Trustees may take many actions affecting the Fund without shareholder approval, including under certain circumstances merging the Fund into another Putnam fund. Shares are freely transferable, are entitled to dividends as declared by the Trustees, and, if the Fund were liquidated, would receive the net assets of the Fund.

The Fund may suspend the sale of shares at any time and may refuse any order to purchase shares. Although the Fund is not required to hold annual meetings of its shareholders, shareholders holding at least 10% of the outstanding shares entitled to vote have the right to call a meeting to elect or remove Trustees, or to take other actions as provided in the Agreement and Declaration of Trust.

Information about the Summary Prospectus, Prospectus and SAI

The Fund has entered into contractual arrangements with an investment adviser, administrator, distributor, shareholder servicing agent, and custodian who each provide services to the Fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the Fund.

Under the Trust's Agreement and Declaration of Trust, any claims asserted by a shareholder against or on behalf of the Trust (or its series), including claims against Trustees and Officers, must be brought in courts of The Commonwealth of Massachusetts .

INVESTMENT RESTRICTIONS

The Fund has adopted the fundamental investment restrictions below for the protection of shareholders. Fundamental investment restrictions may not be changed without a vote of a majority of the outstanding voting securities. The Investment Company Act of 1940, as amended (the "1940 Act"), provides that a "vote of a majority of the outstanding voting securities" of a fund means the affirmative vote of the lesser of (1) more than 50% of the outstanding fund shares, or (2) 67% or more of the shares present at a meeting if more than 50% of the outstanding fund shares are represented at the meeting in person or by proxy.

As fundamental investment restrictions, the Fund may not and will not:

(1) Borrow money in excess of 33 1/3% of the value of its total assets (not including the amount borrowed) at the time the borrowing is made.

(2) Underwrite securities issued by other persons except to the extent that, in connection with the disposition of its portfolio investments, it may be deemed to be an underwriter under certain federal securities laws.

(3) Purchase or sell real estate, although it may purchase securities of issuers which deal in real estate, securities which are secured by interests in real estate, and securities which represent interests in real estate, and it may acquire and dispose of real estate or interests in real estate acquired through the exercise of its rights as a holder of debt obligations secured by real estate or interests therein.

(4) Purchase or sell commodities or commodity contracts, except that the Fund may purchase and sell financial futures contracts and options.

(5) Make loans, except by purchase of debt obligations in which the Fund may invest consistent with its investment policies (including without limitation debt obligations issued by other Putnam funds), by entering into repurchase agreements, or by lending its portfolio securities.

(6)

Large Cap Growth Fund: With respect to 50% of its total assets, invest in securities of any issuer if, immediately after such investment, more than 5% of the total assets of the fund (taken at current value) would be invested in the securities of such issuer; provided that this limitation does not apply to obligations issued or guaranteed as to interest or principal by the U.S. government or its agencies or instrumentalities or to securities issued by other investment companies.

U.S. Research Fund: With respect to 75% of its total assets, invest in securities of any issuer if, immediately after such investment, more than 5% of the total assets of the fund (taken at current value) would be invested in the securities of such issuer; provided that this limitation does not apply to obligations issued or guaranteed as to interest or principal by the U.S. government or its agencies or instrumentalities or to securities issued by other investment companies.

(7)

Large Cap Growth Fund: With respect to 50% of its total assets, acquire more than 10% of the voting securities of any issuer; provided that this limitation does not apply to obligations issued or guaranteed as to interest or principal by the U.S. government or its agencies or instrumentalities or to securities issued by other investment companies.

U.S. Research Fund: With respect to 75% of its total assets, acquire more than 10% of the voting securities of any issuer.

(8) Purchase securities (other than securities of the U.S. government, its agencies or instrumentalities) if, as a result of such purchase, more than 25% of the Fund's total assets would be invested in any one industry.

(9)

Large Cap Growth Fund: Issue any class of securities which is senior to the fund's shares of beneficial interest.

U.S. Research Fund: Issue any class of securities which is senior to the fund's shares of beneficial interest, except for permitted borrowings.

For purposes of the Fund’s fundamental policy on commodities and commodities contracts (#4 above), at the time of the establishment of the policy, swap contracts on financial instruments or rates were not within the understanding of the terms “commodities” or “commodity contracts,” and notwithstanding any federal legislation or regulatory action by the Commodity Futures Trading Commission (“CFTC”) that subject such swaps to regulation by the CFTC, the Fund will not consider such instruments to be commodities or commodity contracts for purposes of this policy.

For purposes of the Fund's fundamental policy on industry concentration (#8 above), the Fund's investment manager determines the appropriate industry categories and assigns issuers to them, informed by a variety of considerations, including relevant third party categorization systems. Industry categories and issuer assignments may change over time as industry sectors and issuers evolve. Portfolio allocations shown in shareholder reports and other communications may use broader investment sectors or narrower sub-industry categories.

All percentage limitations on investments will apply at the time of the making of an investment and shall not be considered violated unless an excess or deficiency occurs or exists immediately after and as a result of such investment.

The Trust has filed an election under Rule 18f-1 under the Investment Company Act of 1940, as amended, committing each fund that is a series of the Trust to pay all redemptions of Fund shares by a single shareholder during any 90-day period in cash, up to the lesser of (i) $250,000 or (ii) 1% of the Fund's net assets measured as of the beginning of such 90-day period.

CHARGES AND EXPENSES

Management fees: Large Cap Growth Fund

Putnam Investment Management, LLC (the "Investment Manager") serves as the Fund's investment manager. Under the Fund's management agreement with the Investment Manager (the "Management Contract"), the Fund pays to the Investment Manager, on a monthly basis, a base fee plus or minus a performance adjustment. The monthly base fee is calculated by applying a rate to the Fund's average net assets for the month. The rate is based on the monthly average of the aggregate net assets of other open-end mutual funds sponsored by the Investment Manager (including open-end mutual funds managed by Franklin Advisers, Inc. that have been deemed to be sponsored by the Investment Manager for this purpose) (excluding net assets of such funds that are invested in, or that are invested in by, other such funds to the extent necessary to avoid "double counting" of those assets) ("Total Open-End Mutual Fund Average Net Assets"), as determined at the close of each business day during the month, as set forth below.

The performance adjustment is a dollar amount added to or subtracted from the Fund's base fee each month based on the Fund's performance relative to its performance index. The performance adjustment is determined based on performance over the thirty-six-month period then ended. Each month, the performance adjustment is calculated by multiplying the performance adjustment rate and the Fund's average net assets over the performance period and dividing the result by twelve. The performance adjustment rate is equal to 0.03 multiplied by the difference, positive or negative, during the performance period between the Fund's annualized performance (measured by the performance of the Fund's class A shares) and the annualized performance of the performance index described below; provided that the performance adjustment rate for the Fund may not exceed 0.12% or be less than -0.12%.

Because the performance adjustment is based on the Fund's performance relative to its performance index, and not its absolute performance, the performance adjustment could increase the Investment Manager's fee even if the Fund's shares lose value during the performance period provided that the Fund outperformed its performance index, and could decrease the Investment Manager's fee even if the Fund's shares increase in value during the performance period provided that the Fund underperformed its performance index.

Large Cap Growth Fund's performance index is the Russell 1000 Growth Index.

The monthly base fee is determined based on the Fund's average net assets for the month, while the performance adjustment is determined based on the Fund's average net assets (calculated as described above) over the thirty-six-month performance period. This means it is possible that, if the Fund underperforms significantly over the performance period, and the Fund's assets have declined significantly over that period, the negative performance adjustment may exceed the base fee. In this event, the Investment Manager would make a payment to the Fund.

The application of an expense limitation, if any, will have a positive effect on the Fund's performance and may result in an increase in the performance adjustment. It is possible that the cumulative dollar amount of additional compensation ultimately payable to the Investment Manager may, under some circumstances, exceed the cumulative dollar amount of management fees waived by the Investment Manager.

Base fee

0.710% of the first $5 billion of Total Open-End Mutual Fund Average Net Assets;

0.660% of the next $5 billion of Total Open-End Mutual Fund Average Net Assets;

0.610% of the next $10 billion of Total Open-End Mutual Fund Average Net Assets;

0.560% of the next $10 billion of Total Open-End Mutual Fund Average Net Assets;

0.510% of the next $50 billion of Total Open-End Mutual Fund Average Net Assets;

0.490% of the next $50 billion of Total Open-End Mutual Fund Average Net Assets;

0.480% of the next $100 billion of Total Open-End Mutual Fund Average Net Assets;

0.475% of any excess thereafter.

Management fees: U.S. Research Fund

Putnam Investment Management, LLC (the “Investment Manager”) serves as the Fund’s investment manager. Under the Fund’s management agreement with the Investment Manager (the “Management Contract”), the Fund pays a monthly fee to the Investment Manager. The fee is calculated by applying a rate to the Fund’s average net assets for the month. The rate is based on the monthly average of the aggregate net assets of other open-end mutual funds sponsored by the Investment Manager (including open-end mutual funds managed by Franklin Advisers, Inc. that have been deemed to be sponsored by the Investment Manager for this purpose) (excluding net assets of such funds that are invested in, or that are invested in by, other such funds to the extent necessary to avoid "double counting" of those assets) (“Total Open-End Mutual Fund Average Net Assets”), as determined at the close of each business day during the month, as set forth below:

0.710% of the first $5 billion of Total Open-End Mutual Fund Average Net Assets;

0.660% of the next $5 billion of Total Open-End Mutual Fund Average Net Assets;

0.610% of the next $10 billion of Total Open-End Mutual Fund Average Net Assets;

0.560% of the next $10 billion of Total Open-End Mutual Fund Average Net Assets;

0.510% of the next $50 billion of Total Open-End Mutual Fund Average Net Assets;

0.490% of the next $50 billion of Total Open-End Mutual Fund Average Net Assets;

0.480% of the next $100 billion of Total Open-End Mutual Fund Average Net Assets;

0.475% of any excess thereafter.

For the past three fiscal years ended July 31, pursuant to the applicable management contract, the Fund incurred the following fees:

Fund name	Fiscal year	Management fee paid	Amount of management fee waived	Amount management fee would have been without waivers
Large Cap Growth Fund	2025	$61,100,092	$57	$61,100,149
	2024	$48,027,840	$1,968	$48,029,808
	2023	$33,632,541	$0	$33,632,541
U.S. Research Fund	2025	$2,977,260	$106,008	$3,083,268
	2024	$2,722,836	$0	$2,722,836
	2023	$2,345,057	$0	$2,345,057

Brokerage commissions

For the past three fiscal years ended July 31, the Fund paid the following brokerage commissions:

Fund name	Fiscal year	Broker commissions
Large Cap Growth Fund	2025	$2,773,835
	2024	$1,429,982
	2023	$1,381,651
U.S. Research Fund	2025	$350,736
	2024	$150,362
	2023	$140,485

The increase in brokerage commissions paid between the fiscal years ended July 31, 2024 and July 31, 2025 was due to an increase in portfolio turnover.
The increase in U.S. Research Fund's portfolio turnover between the fiscal years ended July 31, 2024 and July 31, 2025 was primarily due to repositioning of certain portions of the Fund's portfolio.

For the fiscal year ended July 31, 2025, the Fund placed transactions with brokers and dealers through which the Investment Manager and its affiliates receive brokerage or research services as follows:

Fund name	Dollar Value of these transactions	Amount of commissions
Large Cap Growth Fund	$7,737,490,381	$1,505,561
U.S. Research Fund	$783,249,385	$173,005

As of July 31, 2025, U.S Research Fund held the following securities of its regular broker-dealers (or affiliates of such broker-dealers):

Fund name	Broker-dealer or affiliates	Value of securities held
U.S. Research Fund	Citigroup, Inc.	$7,388
	JPMorgan Chase & Co.	$6,262

As of July 31, 2025, Large Cap Growth Fund did not hold securities of its regular broker-dealers (or affiliates of such broker-dealers).

Administrative expense reimbursement

The Fund reimbursed the Investment Manager for administrative services during the fiscal year ended July 31, 2025, including compensation of certain Trust officers and contributions to the Putnam Retirement Plan for their benefit, as follows:

Fund name	Total reimbursement	Portion of total reimbursement for compensation and contributions
Large Cap Growth Fund	$194,608	$162,108
U.S. Research Fund	$9,687	$8,069

Trustee responsibilities and fees

The Trustees are responsible for generally overseeing the conduct of Fund business. Subject to such policies as the Trustees may determine, the Investment Manager furnishes a continuing investment program for the Fund and makes investment decisions on its behalf. Subject to the control of the Trustees, the Investment Manager also manages the Fund's other affairs and business.

The table below shows the value of each Trustee's holdings in the Fund and in all registered investment companies in the Franklin Templeton funds complex overseen by the Trustee as of December 31, 2024.

Trustees	Dollar Range of Equity Securities in the Fund ($)		Aggregate Dollar Range of Equity Securities in All Registered Investment Companies in the Franklin Templeton Funds Complex Overseen by Trustee ($)
	Large Cap Growth Fund	U.S. Research Fund	
Independent Trustees			
Liaquat Ahamed	$10,001-$50,000	$10,001-$50,000	over $100,000
Barbara M. Baumann	over $100,000	$1-$10,000	over $100,000
Katinka Domotorffy	over $100,000	$50,001-$100,000	over $100,000
Catharine Bond Hill	over $100,000	$1-$10,000	over $100,000
Gregory G. McGreevey	None	None	None
Jennifer Williams Murphy	$1-$10,000	None	$10,001-$50,000
Marie Pillai	$10,001-$50,000	$10,001-$50,000	over $100,000
George Putnam III	over $100,000	over $100,000	over $100,000
Manoj P. Singh	$1-$10,000	$1-$10,000	over $100,000
Mona K. Sutphen	$1-$10,000	$1-$10,000	over $100,000
Interested Trustees			
Jane E. Trust	None	None	over $100,000
Robert L. Reynolds	over $100,000	over $100,000	over $100,000

Each Independent Trustee of the Fund receives an annual retainer fee and an additional fee for each Trustee meeting attended. Independent Trustees also are reimbursed for expenses they incur relating to their services as Trustees. All of the current Independent Trustees of the Fund are Trustees of all the Putnam funds and receive fees for their services.

The Trustees periodically review their fees to ensure that such fees continue to be appropriate in light of their responsibilities as well as in relation to fees paid to trustees of other mutual fund complexes. The Board Policy and Nominating Committee, which consists solely of Independent Trustees of the Fund, estimates that committee and Trustee meeting time, together with the appropriate preparation, requires the equivalent of at least four business days per regular Trustee meeting.

The standing committees of the Board of Trustees, and the number of times each committee met during the fiscal year ended July 31, 2025, are shown in the table below:

Audit, Compliance and Risk Committee	12
Board Policy and Nominating Committee	6
Brokerage Committee	3
Contract Committee	8
Executive Committee	1
Investment Oversight Committees	
Investment Oversight Committee A	5
Investment Oversight Committee B	5
Pricing Committee	8
Exchange-Traded Fund Committee	4

Effective July 1, 2025, the following changes were made to the standing committees:

- The Brokerage Committee, the Pricing Committee and the Exchange-Traded Fund Committee were eliminated as standing committees.

- The Contract Committee assumed the responsibilities of the Brokerage Committee and the Audit, Compliance and Risk Committee assumed the responsibilities of the Pricing Committee.
- The responsibilities of the Exchange-Traded Fund Committee were assumed by the Investment Oversight Committees and the other standing committees as appropriate based on subject matter.

The following table shows the fees paid to each Trustee by the Fund for the fiscal year ended July 31, 2025 and the fees paid to each Trustee by other funds in the Franklin Templeton funds complex for services rendered during the calendar year ended December 31, 2024. Certain Independent Trustees who serve in leadership positions of the Board of Trustees or Board committees receive additional compensation, which is included in the fees shown below.

Trustees	Aggregate compensation from the Fund[1]	Pension or retirement benefits accrued as part of Fund expenses	Estimated annual benefits from Franklin Templeton funds complex upon retirement[2]	Total compensation from Franklin Templeton funds complex
Large Cap Growth Fund				
Independent Trustees				
Liaquat Ahamed	$39,571	N/A	N/A	$382,000
Barbara M. Baumann	$53,239	N/A	N/A	$464,500
Katinka Domotorffy	$39,571	N/A	N/A	$382,000
Catharine Bond Hill	$40,591	N/A	N/A	$368,660
Kenneth R. Leibler[3]	N/A	N/A	N/A	$295,160
Gregory G. McGreevey[4]	$38,224	N/A	N/A	$189,590
Jennifer Williams Murphy	$39,571	N/A	N/A	$382,000
Marie Pillai	$39,571	N/A	N/A	$355,320
George Putnam III	$42,482	$0	$130,333	$407,000
Manoj P. Singh	$41,101	N/A	N/A	$407,000
Mona K. Sutphen	$39,571	N/A	N/A	$382,000
Interested Trustees				
Robert L. Reynolds[5]	N/A	N/A	N/A	N/A
Jane E. Trust[5]	N/A	N/A	N/A	N/A
U.S. Research Fund				
Independent Trustees				
Liaquat Ahamed	$1,963	N/A	N/A	$382,000
Barbara M. Baumann	$2,642	N/A	N/A	$464,500
Katinka Domotorffy	$1,963	N/A	N/A	$382,000
Catharine Bond Hill	$2,013	N/A	N/A	$368,660
Kenneth R. Leibler[3]	N/A	N/A	N/A	$295,160
Gregory G. McGreevey[4]	$1,894	N/A	N/A	$189,590
Jennifer Williams Murphy	$1,963	N/A	N/A	$382,000
Marie Pillai	$1,963	N/A	N/A	$355,320
George Putnam III	$2,107	$0	$130,333	$407,000
Manoj P. Singh	$2,038	N/A	N/A	$407,000
Mona K. Sutphen	$1,963	N/A	N/A	$382,000
Interested Trustees				
Robert L. Reynolds[5]	N/A	N/A	N/A	N/A
Jane E. Trust[5]	N/A	N/A	N/A	N/A

[1] Certain Trustees are also owed compensation deferred pursuant to a Trustee Compensation Deferral Plan. As of July 31, 2025, the total amounts of deferred compensation payable by Large Cap Growth Fund and U.S. Research Fund, including income earned on such amounts, to these Trustees were: Mr. Ahamed – $107,523 and $6,236; Ms. Baumann - $92,404 and $5,359; Ms. Domotorffy - $104,137 and $6,040; Dr. Hill - $74,146 and $4,300; and Ms. Pillai - $41,200 and $2,389, respectively.

[2] Estimated benefits for each Trustee are based on Trustee fee rates for calendar years 2003, 2004 and 2005.

[3] Mr. Leibler retired from the Board of Trustees effective June 30, 2024.

[4] Mr. McGreevey was appointed to the Board of Trustees on May 17, 2024.

[5] Mr. Reynolds and Ms. Trust are not compensated by the Fund for their service as Trustees because of their affiliation with the Investment Manager.

Under a retirement plan for Trustees of Putnam funds (the "Plan"), each Trustee who retires with at least five years of service as a Trustee of the funds is entitled to receive an annual retirement benefit equal to one-half of the average annual attendance and retainer fees paid to such Trustee for calendar years 2003, 2004 and 2005. This retirement benefit is payable during a Trustee's lifetime, beginning the year following retirement, for the number of years of service through December 31, 2006. A death benefit, also available under the Plan, ensures that the Trustee and his or her beneficiaries will receive benefit payments for the lesser of an aggregate period of (i) ten years, or (ii) such Trustee's total years of service.

The Plan Administrator (currently the Board Policy and Nominating Committee) may terminate or amend the Plan at any time, but no termination or amendment will result in a reduction in the amount of benefits (i) currently being paid to a Trustee at the time of such termination or amendment, or (ii) to which a current Trustee would have been entitled had he or she retired immediately prior to such termination or amendment. The Trustees have terminated the Plan with respect to any Trustee first elected to the Board after 2003.

For additional information concerning the Trustees, see "Management" in Part II of this SAI.

Share Ownership

Principal Shareholders

As of November 1, 2025, to the knowledge of the Trust, the following shareholders owned of record or beneficially 5% or more of the outstanding shares of the classes of the Fund as set forth below:

Large Cap Growth Fund

Class	Shareholder name and address	Percentage owned
A	NATIONAL FINANCIAL SERVICES LLC FOR THE EXCLUSIVE BENEFIT OF OUR CUSTOMERS 499 WASHINGTON BLVD ATTN: MUTUAL FUNDS DEPT 4TH FL JERSEY CITY NJ 07310-1995	8.34%
A	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	5.58%
A	WELLS FARGO CLEARING SERVICES, LLC SPECIAL CUSTODY ACCT FOR THE EXCLUSIVE BENEFIT OF CUSTOMER 2801 MARKET ST SAINT LOUIS MO 63103-2523	5.44%
A	EDWARD D JONES & CO FOR THE BENEFIT OF CUSTOMERS 12555 MANCHESTER RD SAINT LOUIS MO 63131-3710	5.39%
C	WELLS FARGO CLEARING SERVICES, LLC SPECIAL CUSTODY ACCT FOR THE EXCLUSIVE BENEFIT OF CUSTOMER 2801 MARKET ST SAINT LOUIS MO 63103-2523	20.70%
C	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	11.54%
C	LPL FINANCIAL --OMNIBUS CUSTOMER ACCOUNT-- ATTN: LINDSAY O'TOOLE 4707 EXECUTIVE DRIVE SAN DIEGO CA 92121-3091	9.37%

C	NATIONAL FINANCIAL SERVICES LLC FOR THE EXCLUSIVE BENEFIT OF OUR CUSTOMERS 499 WASHINGTON BLVD ATTN: MUTUAL FUNDS DEPT 4TH FL JERSEY CITY NJ 07310-1995	8.87%
C	CHARLES SCHWAB & CO INC SPECIAL CUSTODY ACCOUNT FBO THEIR CUSTOMERS ATTN MUTUAL FUNDS 211 MAIN ST SAN FRANCISCO CA 94105-1901	7.45%
C	RAYMOND JAMES OMNIBUS FOR MUTUAL FUNDS HOUSE ACCT FIRM 92500015 ATTN: COURTNEY WALLER 880 CARILLON PKWY ST PETERSBURG FL 33716-1100	7.11%
C	AMERICAN ENTERPRISE INVESTMENT SVC FBO # 41999970 707 2ND AVE S MINNEAPOLIS MN 55402-2405	6.53%
C	MORGAN STANLEY SMITH BARNEY LLC FOR THE EXCLUSIVE BENEFIT OF ITS CUSTOMERS 1 NEW YORK PLAZA FL 12 NEW YORK NY 10004-1965	5.26%
R	CHARLES SCHWAB & CO INC CLEARING ACCOUNT FOR THE EXCLUSIVE BENEFIT OF THEIR CUSTOMERS 101 MONTGOMERY ST SAN FRANCISCO CA 94104-4141	15.16%
R	EMPOWER TRUST FBO PLANPREMIER RTMT PLANS OMNIBUS 8515 E ORCHARD RD # 2T2 GREENWOOD VLG CO 80111-5002	13.32%
R	SAMMONS FINANCIAL NETWORK 8300 MILLS CIVIC PKWY WDM IA 50266-3833	13.25%
R	GREAT-WEST TRUST COMPANY LLC TTEE EMPLOYEE BENEFITS CLIENTS 401K FGWL C/O FASCORE LLC 8515 E ORCHARD RD # 2T2 GREENWOOD VLG CO 80111-5002	8.26%
R5	EMPOWER TRUST FBO RECORDKEEPING FOR VARIOUS BENEFIT P 8525 E ORCHARD RD C/O MUTUAL FUND TRADING GREENWOOD VILLAGE CO 80111-5002	44.98%
R5	FIIOC FBO CRAMER MULTHAUF LLP 401(K) PLAN 100 MAGELLAN WAY COVINGTON KY 41015-1987	38.22%
R5	FIIOC FBO	9.89%

	COMRESOURCE INC 401(K) PROFIT SHARING PLAN 100 MAGELLAN WAY COVINGTON KY 41015-1987	
R6	MAC&CO A/C 017548 ATTN MUTUAL FUND OPERATIONS 500 GRANT ST RM 151 # 2700 PITTSBURGH PA 15219-2531	22.81%
R6	GREAT-WEST TRUST COMPANY LLC TTEE EMPLOYEE BENEFITS CLIENTS 401K C/O FASCORE LLC 8515 E ORCHARD RD # 2T2 GREENWOOD VLG CO 80111-5002	12.02%
R6	EDWARD D JONES & CO FOR THE BENEFIT OF CUSTOMERS 12555 MANCHESTER RD SAINT LOUIS MO 63131-3710	7.43%
Y	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	12.33%
Y	NATIONWIDE TRUST COMPANY FSB C/O IPO PORTFOLIO ACCOUNTING PO BOX 182029 COLUMBUS OH 43218-2029	9.52%
Y	LPL FINANCIAL --OMNIBUS CUSTOMER ACCOUNT-- ATTN: LINDSAY O'TOOLE 4707 EXECUTIVE DRIVE SAN DIEGO CA 92121-3091	7.83%
Y	NATIONWIDE TRUST COMPANY FSB FBO PARTICIPATING RETIREMENT PLANS NTC-PLNS C/O IPO PORTFOLIO ACCOUNTING PO BOX 182029 COLUMBUS OH 43218-2029	7.47%
Y	NATIONAL FINANCIAL SERVICES LLC FOR THE EXCLUSIVE BENEFIT OF OUR CUSTOMERS 499 WASHINGTON BLVD ATTN: MUTUAL FUNDS DEPT 4TH FL JERSEY CITY NJ 07310-1995	6.83%
Y	AMERICAN ENTERPRISE INVESTMENT SVC FBO # 41999970 707 2ND AVE S MINNEAPOLIS MN 55402-2405	6.15%
Y	EMPOWER TRUST FBO GREAT WEST IRA ADVANTAGE C/O FASCORE LLC 8515 E ORCHARD RD 2T2 GREENWOOD VILLAGE CO 80111-5002	5.75%
Y	RAYMOND JAMES OMNIBUS FOR MUTUAL FUNDS HOUSE ACCT FIRM 92500015 ATTN: COURTNEY WALLER	5.43%

	880 CARILLON PKWY ST PETERSBURG FL 33716-1100	

U.S. Research Fund

Class	Shareholder name and address	Percentage owned
A	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	7.01%
A	NATIONAL FINANCIAL SERVICES LLC FOR THE EXCLUSIVE BENEFIT OF OUR CUSTOMERS 499 WASHINGTON BLVD ATTN: MUTUAL FUNDS DEPT 4TH FL JERSEY CITY NJ 07310-1995	6.84%
A	EDWARD D JONES & CO FOR THE BENEFIT OF CUSTOMERS 12555 MANCHESTER RD SAINT LOUIS MO 63131-3710	6.71%
A	WELLS FARGO CLEARING SERVICES, LLC SPECIAL CUSTODY ACCT FOR THE EXCLUSIVE BENEFIT OF CUSTOMER 2801 MARKET ST SAINT LOUIS MO 63103-2523	5.98%
A	LPL FINANCIAL --OMNIBUS CUSTOMER ACCOUNT-- ATTN: LINDSAY O'TOOLE 4707 EXECUTIVE DRIVE SAN DIEGO CA 92121-3091	5.47%
A	AMERICAN ENTERPRISE INVESTMENT SVC FBO # 41999970 707 2ND AVE S MINNEAPOLIS MN 55402-2405	5.31%
C	RAYMOND JAMES OMNIBUS FOR MUTUAL FUNDS HOUSE ACCT FIRM 92500015 ATTN: COURTNEY WALLER 880 CARILLON PKWY ST PETERSBURG FL 33716-1100	11.60%
C	LPL FINANCIAL --OMNIBUS CUSTOMER ACCOUNT-- ATTN: LINDSAY O'TOOLE 4707 EXECUTIVE DRIVE SAN DIEGO CA 92121-3091	11.18%
C	WELLS FARGO CLEARING SERVICES, LLC SPECIAL CUSTODY ACCT FOR THE EXCLUSIVE BENEFIT OF CUSTOMER 2801 MARKET ST SAINT LOUIS MO 63103-2523	9.54%
C	AMERICAN ENTERPRISE INVESTMENT SVC FBO # 41999970 707 2ND AVE S MINNEAPOLIS MN 55402-2405	9.53%
C	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	8.67%

C	CHARLES SCHWAB & CO INC SPECIAL CUSTODY ACCOUNT FBO THEIR CUSTOMERS ATTN MUTUAL FUNDS 211 MAIN ST SAN FRANCISCO CA 94105-1901	7.66%
R	SAMMONS FINANCIAL NETWORK 8300 MILLS CIVIC PKWY WDM IA 50266-3833	36.68%
R	ASCENSUS TRUST COMPANY FBO PREMIER PROTECTIVE PACKAGING 401(K) 685560 PO BOX 10758 FARGO ND 58106-0758	13.61%
R	EMPOWER TRUST FBO PLANPREMIER RTMT PLANS OMNIBUS 8515 E ORCHARD RD # 2T2 GREENWOOD VLG CO 80111-5002	12.15%
R	MATRIX TRUST COMPANY AS AGENT FOR ADVISOR TRUST INC FRANKLIN TEMPLETON OMNIBUS 403BS 717 17TH ST STE 1300 DENVER CO 80202-3304	12.03%
R	ASCENSUS TRUST COMPANY FBO CITY OF LEAGUE CITY 457 PLAN 69004 PO BOX 10758 FARGO ND 58106-0758	8.42%
R6	EDWARD D JONES & CO FOR THE BENEFIT OF CUSTOMERS 12555 MANCHESTER RD SAINT LOUIS MO 63131-3710	70.86%
R6	EMPOWER TRUST FBO EMPLOYEE BENEFITS CLIENTS 401K 8515 E ORCHARD RD 2T2 GREENWOOD VILLAGE CO 80111-5002	15.29%
Y	NATIONAL FINANCIAL SERVICES LLC FOR THE EXCLUSIVE BENEFIT OF OUR CUSTOMERS 499 WASHINGTON BLVD ATTN: MUTUAL FUNDS DEPT 4TH FL JERSEY CITY NJ 07310-1995	22.66%
Y	AMERICAN ENTERPRISE INVESTMENT SVC FBO # 41999970 707 2ND AVE S MINNEAPOLIS MN 55402-2405	15.07%
Y	RAYMOND JAMES OMNIBUS FOR MUTUAL FUNDS HOUSE ACCT FIRM 92500015 ATTN: COURTNEY WALLER 880 CARILLON PKWY ST PETERSBURG FL 33716-1100	11.81%
Y	LPL FINANCIAL --OMNIBUS CUSTOMER ACCOUNT-- ATTN: LINDSAY O'TOOLE 4707 EXECUTIVE DRIVE	10.61%

	SAN DIEGO CA 92121-3091	
Y	PERSHING, LLC 1 PERSHING PLZ JERSEY CITY NJ 07399-0001	8.68%
Y	CHARLES SCHWAB & CO INC SPECIAL CUSTODY A/C FBO CUSTOMERS ATTN MUTUAL FUNDS 101 MONTGOMERY ST SAN FRANCISCO CA 94104-4141	8.20%
Y	WELLS FARGO CLEARING SERVICES, LLC SPECIAL CUSTODY ACCT FOR THE EXCLUSIVE BENEFIT OF CUSTOMER 2801 MARKET ST SAINT LOUIS MO 63103-2523	6.08%

As of November 1, 2025, the Trustees and officers of the Trust, as a group, owned less than 1% of the outstanding shares of each class of the Fund.

Distribution fees

During the fiscal year ended July 31, 2025, the Fund paid the following 12b-1 fees to the Fund's distributor, Franklin Distributors, LLC (the "Distributor") or Putnam Retail Management Limited Partnership ("Putnam Retail Management"), the Fund's distributor prior to August 2, 2024:

Fund name	Class A	Class B*	Class C	Class R
Large Cap Growth Fund	$18,832,115	$5,813	$1,432,788	$110,525
U.S. Research Fund	$1,139,622	$411	$98,517	$8,068

* Effective September 5, 2024, class B shares of the Fund converted to class A shares.

Initial sales charges

For the past three fiscal years ended July 31, the aggregate dollar amounts of initial sales charges received on Class A shares and the amounts retained by the Distributor or Putnam Retail Management were as follows:

Class A Shares

Fund name	Fiscal year	Total front-end sales charges	Sales charges retained by the Distributor
Large Cap Growth Fund	2025	$2,458,243	$536,749
	2024	$2,218,147	$450,022
	2023	$1,505,413	$309,456
U.S. Research Fund	2025	$187,906	$35,469
	2024	$216,436	$41,897
	2023	$129,692	$24,646

Contingent deferred sales charges

For the past three fiscal years ended July 31, the aggregate dollar amounts of contingent deferred sales charges received on Class A, B and C shares of the Fund received and retained by the Distributor or Putnam Retail Management were as follows:

Class A shares

Fund name	Fiscal year	Contingent deferred sales charges
Large Cap Growth Fund	2025	$2,278
	2024	$1,764
	2023	$697
U.S. Research Fund	2025	$606
	2024	$2,101
	2023	$69

Class B shares*

Fund name	Fiscal year	Contingent deferred sales charges
Large Cap Growth Fund	2025	$4
	2024	$345
	2023	$228
U.S. Research Fund	2025	$0
	2024	$0
	2023	$13

* Effective September 5, 2024, class B shares of the Fund converted to class A shares.

Class C shares

Fund name	Fiscal year	Contingent deferred sales charges
Large Cap Growth Fund	2025	$15,736
	2024	$5,199
	2023	$1,178
U.S. Research Fund	2025	$1,801
	2024	$779
	2023	$235

PORTFOLIO MANAGERS

Other Accounts Managed by the Portfolio Managers

The table below identifies the portfolio managers, the number of accounts (other than the Fund) for which the portfolio managers have day-to-day management responsibilities and the total assets in such accounts, within each of the following categories: registered investment companies, other pooled investment vehicles, and other accounts. For each category, the number of accounts and total assets in the accounts where fees are based on performance are also indicated, as applicable. Unless noted otherwise, all information is provided as of July 31, 2025.

Portfolio Manager	Type of Account	Number of Accounts Managed	Total Assets Managed (Millions) ($)	Number of Accounts Managed for which Advisory Fee is Performance-Based	Assets Managed for which Advisory Fee is Performance-Based (Millions) ($)
Large Cap Growth Fund					
Richard Bodzy	Registered Investment Companies	10	5,588.0	0	0
	Other Pooled Investment Vehicles	6	656.9	0	0
	Other Accounts	8	8,923.5	0	0
Gregory McCullough	Registered Investment Companies	10	5,588.0	0	0
	Other Pooled Investment Vehicles	6	656.9	0	0
	Other Accounts	8	8923.5	0	0
U.S. Research Fund					
Jacquelyne Cavanaugh	Registered Investment Companies	2	817.3	0	0
	Other Pooled Investment Vehicles	0	0	0	0
	Other Accounts	0	0	0	0
Kathryn Lakin	Registered Investment Companies	3	2633.7	0	0
	Other Pooled Investment Vehicles	4	551.0	0	0
	Other Accounts	3	38.2	0	0

Matthew LaPlant	Registered Investment Companies	1	126.4	0	0
	Other Pooled Investment Vehicles	2	382.3	0	0
	Other Accounts	3	38.2	0	0
Andrew O'Brien	Registered Investment Companies	2	1532.4	0	0
	Other Pooled Investment Vehicles	0	0	0	0
	Other Accounts	0	0	0	0
William Rives	Registered Investment Companies	3	822.4	0	0
	Other Pooled Investment Vehicles	0	0	0	0
	Other Accounts	0	0	0	0

Compensation of portfolio managers

The Investment Manager seeks to maintain a compensation program that is competitively positioned to attract, retain and motivate top-quality investment professionals. Portfolio managers receive a base salary, a cash incentive bonus opportunity, an equity compensation opportunity, and a benefits package. Portfolio manager compensation is reviewed annually, and the level of compensation is based on individual performance, the salary range for a portfolio manager's level of responsibility and Franklin Templeton guidelines. Portfolio managers are provided no financial incentive to favor one fund or account over another. Each portfolio manager's compensation consists of the following three elements:

Base salary Each portfolio manager is paid a base salary.

Annual bonus Annual bonuses are structured to align the interests of the portfolio manager with those of the Fund's shareholders. Each portfolio manager is eligible to receive an annual bonus. Bonuses generally are split between cash and restricted shares of Franklin Resources, Inc. ("Resources") stock and mutual fund shares. The deferred equity-based compensation is intended to build a vested interest of the portfolio manager in the financial performance of both Resources and mutual funds advised by the Investment Manager. The bonus plan is intended to provide a competitive level of annual bonus compensation that is tied to the portfolio manager achieving consistently strong investment performance, which aligns the financial incentives of the portfolio manager and Fund shareholders. The Chief Investment Officer of the Investment Manager and/or other officers of the Investment Manager, with responsibility for the Fund, have discretion in the granting of annual bonuses to portfolio managers in accordance with Franklin Templeton guidelines. The following factors are generally used in determining bonuses under the plan:

- *Investment performance.* Primary consideration is given to the historic investment performance over the 1, 3 and 5 preceding years of all accounts managed by the portfolio manager. The pre-tax performance of each fund managed is measured relative to a relevant peer group and/or applicable benchmark as appropriate.
- *Non-investment performance.* The more qualitative contributions of the portfolio manager to the Investment Manager's business and the investment management team, including professional knowledge, productivity, responsiveness to client needs and communication, are evaluated in determining the amount of any bonus award.
- *Responsibilities.* The characteristics and complexity of funds managed by the portfolio manager are factored in the Investment Manager's appraisal.

Additional long-term equity-based compensation Portfolio managers may also be awarded restricted shares or units of Resources stock or restricted shares or units of one or more mutual funds. Awards of such deferred equity-based compensation typically vest over time, so as to create incentives to retain key talent.

Benefits Portfolio managers also participate in benefit plans and programs available generally to all employees of the Investment Manager.

Portfolio managers' securities ownership

The table below identifies ownership of equity securities of the Fund by the portfolio managers responsible for the day-to-day management of the Fund as of July 31, 2025.

Portfolio Managers	Dollar Range of Ownership of Securities ($)
Large Cap Growth Fund	
Richard Bodzy	Over $1,000,000
Gregory McCullough	Over $1,000,000
U.S. Research Fund	
Jacquelyne Cavanaugh	$100,001-$500,000
Kathryn Lakin	over $1,000,000
Matthew LaPlant	$500,001-$1,000,000
Andrew O'Brien	$500,001-$1,000,000
William Rives	$100,001-$500,000

See "Management—Portfolio Transactions—Potential conflicts of interest in managing multiple accounts" in Part II of this SAI for information on how the Investment Manager addresses potential conflicts of interest resulting from an individual's management of more than one account.

SECURITIES LENDING ACTIVITIES: Large Cap Growth Fund

For fiscal year ended July 31, 2025, the income earned by the Fund as well as the fees and/or compensation paid by the Fund were as follows (figures may differ from those shown in the Fund's financial statements due to time of availability and use of estimates):

	Large Cap Growth Fund
Gross income from securities lending activities	$365,599
Fees and/or compensation for securities lending activities and related services:	
Fees paid to securities lending agent from a revenue split	($1,536)
Fees paid for any cash collateral management service (including fees deducted from a pooled cash collateral reinvestment vehicle) that are not included in the revenue split	$0
Administrative fees not included in revenue split	$0
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	($350,234)
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	($351,770)
Net income from securities lending activities	$13,829

Goldman Sachs Bank USA (d/b/a Goldman Sachs Agency Lending, or "GSAL") acts as the securities lending agent for the Fund. As securities lending agent, during the last fiscal year, GSAL located borrowers for Fund securities, monitored daily the value of the loaned securities and collateral, required additional collateral as necessary, negotiated loan terms, provided certain limited recordkeeping and account servicing, monitored dividend activity and material proxy votes relating to loaned securities, and arranged for return of loaned securities to the Fund at loan termination, and, as applicable, in connection with proxy votes.

SECURITIES LENDING ACTIVITIES: U.S. Research Fund

U.S. Research Fund did not participate in any securities lending activities for the fiscal year ended July 31, 2025.

FINANCIAL STATEMENTS

The Fund's Form N-CSR for the fiscal year ended July 31, 2025 (https://www.sec.gov/ix?doc=/Archives/edgar/data/932101/000113322825010183/plcgf-efp17560_ncsr.htm https://www.sec.gov/ix?doc=/Archives/edgar/data/932101/000113322825010177/pusrf-efp17563_ncsr.htm) contains the Fund's audited financial statements, accompanying notes and the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, all of which are incorporated by reference into this SAI. These audited financial statements are available free of charge upon request by calling the Fund at 1-800-225-1581.

THE PUTNAM FUNDS
STATEMENT OF ADDITIONAL INFORMATION ("SAI")
PART II

Throughout this Statement of Additional Information, references to the fund's investment manager (the "Investment Manager") shall refer to the entity indicated for each fund in the table below:

Investment Manager	Franklin Advisers, Inc. ("Franklin Advisers")	Putnam Investment Management, LLC ("Putnam Management")
Funds	Putnam Diversified Income Trust Putnam Core Bond Fund Putnam Dynamic Asset Allocation Balanced Fund Putnam Dynamic Asset Allocation Conservative Fund Putnam Dynamic Asset Allocation Equity Fund Putnam Dynamic Asset Allocation Growth Fund Putnam Floating Rate Income Fund Putnam Global Income Trust Putnam Government Money Market Fund Putnam High Yield Fund Putnam Income Fund Putnam Money Market Fund Putnam Mortgage Opportunities Fund Putnam Mortgage Securities Fund Putnam Multi-Asset Income Fund Putnam Retirement Advantage 2030 Fund Putnam Retirement Advantage 2035 Fund Putnam Retirement Advantage 2040 Fund Putnam Retirement Advantage 2045 Fund Putnam Retirement Advantage 2050 Fund Putnam Retirement Advantage 2055 Fund Putnam Retirement Advantage 2060 Fund Putnam Retirement Advantage 2065 Fund Putnam Retirement Advantage 2070 Fund Putnam Retirement Advantage Maturity Fund Putnam Short Duration Bond Fund Putnam Short Term Investment Fund Putnam Strategic Intermediate Municipal Fund Putnam Sustainable Retirement 2030 Fund Putnam Sustainable Retirement 2035 Fund Putnam Sustainable Retirement 2040 Fund Putnam Sustainable Retirement 2045 Fund Putnam Sustainable Retirement 2050 Fund Putnam Sustainable Retirement 2055 Fund	George Putnam Balanced Fund Putnam Convertible Securities Fund Putnam Core Equity Fund Putnam Emerging Markets Equity Fund Putnam Focused Equity Fund Putnam Focused International Equity Fund Putnam Global Health Care Fund Putnam Global Technology Fund Putnam International Equity Fund Putnam International Small Cap Fund Putnam International Value Fund Putnam Large Cap Growth Fund Putnam Large Cap Value Fund Putnam Small Cap Growth Fund Putnam Small Cap Value Fund Putnam Sustainable Future Fund Putnam Sustainable Leaders Fund Putnam U.S. Research Fund Putnam VT Core Equity Fund Putnam VT Emerging Markets Equity Fund Putnam VT Focused International Equity Fund Putnam VT George Putnam Balanced Fund Putnam VT Global Health Care Fund Putnam VT International Equity Fund Putnam VT International Value Fund Putnam VT Large Cap Growth Fund Putnam VT Large Cap Value Fund Putnam VT Research Fund Putnam VT Small Cap Growth Fund Putnam VT Small Cap Value Fund Putnam VT Sustainable Future Fund Putnam VT Sustainable Leaders Fund

	Putnam Sustainable Retirement 2060 Fund Putnam Sustainable Retirement 2065 Fund Putnam Sustainable Retirement 2070 Fund Putnam Sustainable Retirement Maturity Fund Putnam Ultra Short Duration Income Fund Putnam Ultra Short MAC Series Putnam VT Diversified Income Fund Putnam VT Global Asset Allocation Fund Putnam VT Government Money Market Fund Putnam VT High Yield Fund Putnam VT Income Fund Putnam VT Mortgage Securities Fund	

HOW TO BUY SHARES

Each prospectus of a fund (a "prospectus") describes briefly how investors may buy shares of the fund and identifies the share classes offered by that prospectus. For a fund that offers multiple classes of shares, the investment performance of the classes will vary because of different sales charges and expenses. This section of the SAI contains more information on how to buy shares. For more information, including your eligibility to purchase certain classes of shares, contact your investment dealer or Putnam Investor Services, Inc., the funds' investor servicing agent ("Putnam Investor Services"), at 1-800-225-1581. Investors who purchase shares at net asset value through employer-sponsored retirement plans (including, for example, 401(k) plans, employer-sponsored 403(b) plans, and 457 plans, as well as "non-qualified" deferred compensation plans) should also consult their employer for information about the extent to which the matters described in this section and in the sections that follow apply to them.

Except as set forth below, the fund does not accept new accounts or additional investments (including by way of exchange from another fund) into existing accounts held in the name of persons or entities that do not have both a residential or business address within the United States (including APO/FPO addresses) and a valid U.S. tax identification number. Any existing account that is updated to reflect a non-U.S. address will also be restricted from making additional investments. Individuals resident in the European Economic Area ("EEA"), in particular, should take note that the fund's shares are not offered for sale in the EEA.

Non-U.S. institutional clients may invest in a fund, provided that the client is acting for its own account and is not a financial institution (e.g., a broker-dealer purchasing shares on behalf of its customers), and has provided Putnam with documentation (i) that is appropriate to the type of entity seeking to establish the account and (ii) sufficient to enable Putnam Investor Services to determine that the investment would not violate any applicable securities laws or regulations, including non-U.S. laws and regulations. Non-U.S. employees of Putnam may invest in a fund during the term of employment of the employee, subject to applicable law and certain procedural requirements.

In addition, class M shares are only available (1) to certain employer-sponsored retirement plans investing in George Putnam Balanced Fund and (2) for Putnam Diversified Income Trust, Putnam High Yield Fund, and Putnam Income Fund for public offering in Japan through certain Japanese registered broker-dealers with whom Franklin Distributors, LLC ("Franklin Distributors") has an agreement. All other class M shares of the Putnam open-end mutual funds ("Putnam Funds") were converted into class A shares effective November 25, 2019, except that class M shares of Putnam Global Income Trust and Putnam Mortgage Securities Fund held in Japan were liquidated effective December 9, 2019.

In addition, shares of Putnam Ultra Short MAC Series are only available to "wrap" account clients ("eligible investors") where the Investment Manager has an agreement to serve as investment adviser to the wrap program sponsor (typically a registered investment adviser or broker-dealer) or directly to the wrap account clients of the wrap program sponsor.

In addition, the fund does not accept new accounts or additional investments (including by way of exchange from another fund) into existing accounts by entities that Putnam Investor Services has reason to believe are involved in the sale or distribution of marijuana, even if such sale or distribution is licensed by a state.

General Information

The fund is currently making a continuous offering of its shares. The fund receives the entire net asset value of shares sold. The fund will accept unconditional orders for shares to be executed at the current offering price based on the net asset value per share next determined after the order is placed. In the case of class A shares, class M shares and class N shares, the offering price is the net asset value plus the applicable sales charge, if any. (The offering price is thus calculable by dividing the net asset value by 100% minus the sales charge, expressed as a percentage.) No sales charge is included in the offering price of other classes of shares. In the case of orders for purchase of shares placed through dealers, the offering price will be based on the net asset value determined on the day the order is placed, but only if the dealer or a registered transfer agent or registered clearing agent receives the order, together with all required identifying information, before the close of regular trading on the New York Stock Exchange (the "NYSE"). If the dealer or registered transfer agent or registered clearing agent receives the order after the close of the NYSE, the price will be based on the net asset value next determined. If funds for the purchase of shares are sent directly to Putnam Investor Services, they will be invested at the offering price based on the net asset value next determined

after all required identifying information has been collected. Payment for shares of the fund must be in U.S. dollars; if made by check, the check must be drawn on a U.S. bank.

Initial purchases are subject to the minimums stated in the prospectus, except that (i) individual investments under certain employer-sponsored retirement plans or Tax Qualified Retirement Plans may be lower, and (ii) the minimum investment is waived for investors participating in systematic investment plans or military allotment plans. Information about these plans is available from investment dealers or Putnam Investor Services. Currently Putnam is waiving the minimum for all initial purchases, but reserves the right to reject initial purchases under the minimum in the future, except as noted in the first sentence of this paragraph.

Systematic investment plan. As a convenience to investors, shares (other than shares of Putnam Multi-Asset Income Fund and shares of Putnam Ultra Short MAC Series) may be purchased through a systematic investment plan. Pre-authorized periodic (e.g., monthly, quarterly, semi-annually, or annually) bank drafts for a fixed amount ($200,000 or less) are used to purchase fund shares at the applicable offering price next determined after Franklin Distributors receives the proceeds from the draft. A shareholder may choose any day of the month for these investments; however, if the selected date falls on a weekend or holiday, the investment will be processed on the next business day. For February, April, June, September and November, if the selected date does not occur (the 29th, 30th, or 31st, as applicable), the investment will be processed the prior business day. Further information and application forms are available from the investment dealers or from Franklin Distributors.

Reinvestment of distributions. Distributions to be reinvested are reinvested without a sales charge in shares of any Putnam Fund the shareholder is eligible to invest in under the shareholder's account as of the ex-dividend date using the net asset value determined on that date, and are credited to a shareholder's account on the payment date. Dividends for Putnam money market funds are credited to a shareholder's account on the payment date. Distributions for all other funds that declare a distribution daily are reinvested without a sales charge as of the last day of the period for which distributions are paid using the net asset value determined on that date, and are credited to a shareholder's account on the payment date.

Purchasing shares with securities ("in-kind" purchases). In addition to cash, the fund will consider accepting securities as payment for fund shares at the applicable net asset value. Generally, the fund will only consider accepting securities to increase its holdings in a portfolio security, or if the Investment Manager determines that the offered securities are a suitable investment for the fund and in a sufficient amount for efficient management.

While no minimum has been established, it is expected that the fund would not accept securities with a value of less than $100,000 per issue as payment for shares. The fund may reject in whole or in part any or all offers to pay for purchases of fund shares with securities, may require partial payment in cash for such purchases to provide funds for applicable sales charges, and may discontinue accepting securities as payment for fund shares at any time without notice. The fund will value accepted securities in the manner described in the section "Determination of Net Asset Value" for valuing shares of the fund. The fund will only accept securities that are delivered in proper form. The fund will not accept certain securities, for example, options or restricted securities, as payment for shares. The acceptance of securities by certain funds in exchange for fund shares is subject to additional requirements. For federal income tax purposes, a purchase of fund shares with securities will be treated as a sale or exchange of such securities on which the investor will generally realize a taxable gain or loss. The processing of a purchase of fund shares with securities involves certain delays while the fund considers the suitability of such securities and while other requirements are satisfied. For information regarding procedures for payment in securities, contact Franklin Distributors. Investors should not send securities to the fund except when authorized to do so and in accordance with specific instructions received from Franklin Distributors.

Sales Charges and Other Share Class Features

This section describes certain key features of share classes offered to retail investors and retirement plans that do not purchase shares at net asset value. Much of this information addresses the sales charges, including initial sales charges and contingent deferred sales charges ("CDSCs") imposed on the different share classes and various commission payments made by Putnam to dealers and other financial intermediaries facilitating shareholders' investments. This information supplements the descriptions of these share classes and payments included in the prospectus.

Initial sales charges, dealer commissions and CDSCs on shares sold outside the United States may differ from those applied to U.S. sales.

Initial sales charges for class A, class M and class N shares. The offering price of class A, class M and class N shares is the net asset value plus a sales charge that varies depending on the size of your purchase (calculable as described above). The fund receives the net asset value. The tables below indicate the sales charges applicable to purchases of class A, class M and class N shares of the funds by style category.

The sales charge for class A, class M and class N shares is allocated between your investment dealer and Franklin Distributors as shown in the tables below, except when Franklin Distributors, in its discretion, allocates the entire amount to your investment dealer.

The underwriter's commission, or dealer reallowance, is the sales charge shown in the prospectus less any applicable dealer discount. Franklin Distributors will give dealers ten days' notice of any changes in the dealer discount.

Franklin Distributors retains the entire sales charge on any retail sales made by it. The Putnam Funds require that a broker-dealer be associated with every account (a "broker-dealer of record"). In instances where the registered account owner has not designated a broker-dealer of record, Franklin Distributors will be defaulted as the broker-dealer of record for the account. Franklin Distributors is not a full-service broker-dealer, and does not provide investment advice. As default broker-dealer of record, Franklin Distributors will not be able to provide services that are typically offered by a brokerage firm, such as assisting with financial planning or providing recommendations, or otherwise assisting with investment decisions. Where Franklin Distributors is listed as the default broker-dealer of record for an account, it will receive all applicable sales charges and service fees associated with the account.

For purchases of class A shares by retail investors that qualify for the highest sales charge breakpoint described in the prospectus, and certain Employer-Sponsored Retirement Plans approved by Franklin Distributors, Franklin Distributors pays commissions on sales during the one-year period beginning with the date of the initial purchase qualifying for that breakpoint. Each subsequent one-year measuring period for these purposes begins with the first qualifying purchase following the end of the prior period. For all funds, except for purchases of Putnam Short Duration Bond Fund on or after January 1, 2021, these commissions are paid at the rate of 1.00% of the amount of qualifying purchases up to $4 million, 0.50% of the next $46 million of qualifying purchases and 0.25% of qualifying purchases thereafter. For purchases of Putnam Short Duration Bond Fund on or after January 1, 2021, these commissions are paid at the rate of 0.75% of the amount of qualifying purchases up to $4 million, 0.50% of the next $46 million of qualifying purchases and 0.25% of qualifying purchases thereafter.

For purchases of class N shares over $250,000, Franklin Distributors pays commissions on sales during the one-year period beginning with the date of the initial purchase. Each subsequent one-year measuring period for these purposes begins with the first qualifying purchase following the end of the prior period. Commissions for these purchases are paid at the rate of 0.25% of the amount of qualifying purchases up to $4 million, 0.15% of the next $46 million of qualifying purchases and 0.10% of qualifying purchases thereafter.

For Growth Funds, Blend Funds, Value Funds, Asset Allocation Funds (excluding George Putnam Balanced Fund and Putnam Multi-Asset Income Fund), Global Healthcare Fund, Global Technology Fund, the Putnam Retirement Advantage Funds (excluding Putnam Retirement Advantage Maturity Fund) and the Putnam Sustainable Retirement Funds (excluding Putnam Sustainable Retirement Maturity Fund) only:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 50,000	5.75%	5.00%
50,000 but under 100,000	4.50%	3.75%
100,000 but under 250,000	3.50%	2.75%
250,000 but under 500,000	2.50%	2.00%
500,000 but under 1,000,000	2.00%	1.75%
1,000,000 and above	NONE	NONE

For Putnam Retirement Advantage Maturity Fund, Putnam Sustainable Retirement Maturity Fund, Taxable Income Funds (except for Putnam Core Bond Fund, Money Market Funds, Putnam Floating Rate Income Fund, Putnam Ultra Short Duration Income Fund, Putnam Diversified Income Trust, Putnam High Yield Fund, Putnam Income Fund, and Putnam Short Duration Bond Fund), and for purchases of Tax-Exempt Funds prior to July 1, 2022:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 50,000	4.00%	3.50%
50,000 but under 100,000	4.00%	3.50%
100,000 but under 250,000	3.25%	2.75%
250,000 but under 500,000	2.50%	2.00%
500,000 and above	NONE	NONE

For purchases of Tax-Exempt Funds (except for Putnam Strategic Intermediate Municipal Fund) on or after July 1, 2022 and for purchases of Putnam Multi-Asset Income Fund and Putnam Core Bond Fund:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 50,000	4.00%	3.50%
50,000 but under 100,000	3.25%	2.75%
100,000 but under 250,000	2.50%	2.00%
250,000 and above	NONE	NONE

For Putnam Floating Rate Income Fund only:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 100,000	2.25%	2.00%
100,000 but under 250,000	1.75%	1.50%
250,000 but under 500,000	1.25%	1.00%
500,000 and above	NONE	NONE

For purchases of Putnam Strategic Intermediate Municipal Fund only on or after July 1, 2022, and purchases of Putnam Short Duration Bond Fund only prior to January 1, 2021:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 100,000	2.25%	2.00%
100,000 but under 250,000	1.25%	1.00%
250,000 and above	NONE	NONE

For purchases of Putnam Short Duration Bond Fund on or after January 1, 2021:

	CLASS A	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 100,000	2.25%	2.00%
100,000 - 249,999	1.25%	1.00%
250,000 and above	NONE	NONE

For George Putnam Balanced Fund only:

	CLASS A		CLASS M	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 50,000	5.75%	5.00%	3.50%	3.00%
50,000 but under 100,000	4.50%	3.75%	2.50%	2.00%
100,000 but under 250,000	3.50%	2.75%	1.50%	1.00%
250,000 but under 500,000	2.50%	2.00%	1.00%	1.00%
500,000 but under 1,000,000	2.00%	1.75%	1.00%	1.00%
1,000,000 and above	NONE	NONE	N/A	N/A

For Putnam Diversified Income Trust, Putnam High Yield Fund and Putnam Income Fund only:

	CLASS A		CLASS M	
Amount of transaction at offering price ($)	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**	**Sales charge as a percentage of offering price**	**Amount of sales charge reallowed to dealers as a percentage of offering price**
Under 50,000	4.00%	3.50%	3.25%	3.00%
50,000 but under 100,000	4.00%	3.50%	2.25%	2.00%
100,000 but under 250,000	3.25%	2.75%	1.25%	1.00%
250,000 but under 500,000	2.50%	2.00%	1.00%	1.00%
500,000 and above	NONE	NONE	N/A*	N/A*

*The funds will not accept purchase orders for class M shares (other than by employer-sponsored retirement plans) where the total of the current purchase, plus existing account balances that are eligible to be linked under a right of accumulation (as described below) is $500,000 or more.

For all Putnam Funds that offer class N shares:

CLASS N

Amount of transaction at offering price ($)	Sales charge as a percentage of offering price	Amount of sales charge reallowed to dealers as a percentage of offering price
Under 50,000	1.50%	1.25%
50,000 but under 100,000	1.25%	1.00%
100,000 but under 250,000	1.00%	0.75%
250,000 and above	NONE	NONE

Purchases of class A and class N shares without an initial sales charge. Class A shares of any Putnam Fund (other than Putnam Short Duration Bond Fund, Putnam Ultra Short Duration Income Fund, Putnam Government Money Market Fund, and Putnam Money Market Fund) purchased by retail investors that are not subject to an initial sales charge (in accordance with the schedules stated above) are subject to a CDSC of 1.00% if redeemed before the first day of the month in which the twelve-month anniversary of that purchase occurs. Class A shares of Putnam Short Duration Bond Fund purchased prior to January 1, 2021 by retail investors that are not subject to an initial sales charge (in accordance with the schedules stated above) are subject to a CDSC of 1.00% if redeemed before the first day of the month in which the nine-month anniversary of that purchase occurs. Class A shares of Putnam Short Duration Bond Fund purchased on or after January 1, 2021 by retail investors that are not subject to an initial sales charge (in accordance with the schedules stated above) are subject to a CDSC of 0.75% if redeemed before the first day of the month in which the nine-month anniversary of that purchase occurs. Class A shares of Putnam Ultra Short Duration Income Fund, Putnam Money Market Fund and Putnam Government Money Market Fund purchased by retail investors by exchanging shares from another Putnam Fund that were not subject to an initial sales charge (in accordance with the schedules stated above) are subject to a CDSC of 1.00% if redeemed before the first day of the month in which the twelve-month anniversary of the original purchase occurs. Class N shares of any Putnam Fund purchased by retail investors that are not subject to an initial sales charge (in accordance with the schedules stated above) are subject to a CDSC of 0.25% if redeemed before the first day of the month in which the nine-month anniversary of that purchase occurs.

The CDSC assessed on redemptions of fewer than all of an investor's class A shares or class N shares subject to a CDSC will be based on the amount of the redemption minus the amount of any appreciation on the investor's CDSC-subject shares since the purchase of such shares. The CDSC assessed on full redemptions of CDSC-subject shares will be based on the lower of the shares' cost and current NAV. Class A shares that are exchanged between Putnam Funds will maintain the CDSC time period for the fund in which the initial purchase was made. Franklin Distributors will retain any CDSC imposed on redemptions of such shares to compensate it for the up-front commissions paid to financial intermediaries for such share sales.

Purchases of class A shares for rollover IRAs. Purchases of class A shares for a Putnam Rollover IRA or a rollover IRA of a Putnam affiliate, from a retirement plan for which an affiliate of the Investment Manager or a business partner of such affiliate is the administrator, including subsequent contributions, are not subject to an initial sales charge or CDSC.

Commission payments and CDSCs for class C shares.

Except in the case of Putnam Money Market Fund, Putnam Government Money Market Fund and Putnam Ultra Short Duration Income Fund, Franklin Distributors pays financial intermediaries a 1.00% commission on sales of class C shares of a fund.

Franklin Distributors will retain any CDSC imposed on redemptions of class C shares to compensate it for the cost of paying the up-front commissions paid to financial intermediaries for class C share sales.

Conversion of class C shares into class A shares. Class C shares will automatically convert to class A shares during the month eight years after the purchase date, provided that Putnam Investor Services, or the financial intermediary through which a shareholder purchased class C shares has records verifying that the class C shares have been held for at least eight years, and that class A shares are available for purchase by residents in the shareholder's jurisdiction. In certain cases, records verifying that the class C shares have been held for at least eight years may not be available (for example, participant level share lot aging may not be tracked by group retirement plan recordkeeping platforms through which class C shares of the fund are held in an omnibus account). If such records are unavailable, Putnam Investor Services or the relevant financial intermediary may not effect the conversion or may effect the conversion on a different schedule determined by Putnam Investor Services or the financial intermediary, which may be shorter or longer than eight years. Class C shares acquired by exchanging class C shares of another Putnam Fund will convert to class A shares based on the time of the initial purchase. Any CDSC for such shares will be

calculated using the schedule of the fund into or from which shares have been exchanged that would result in the highest CDSC applicable to such shares. Class C shares acquired through reinvestment of distributions will convert to class A shares based on the date of the initial purchase to which such shares relate. For this purpose, class C shares acquired through reinvestment of distributions will be attributed to particular purchases of class C shares in accordance with such procedures as the fund's trustees (such trustees, as referenced below under the heading "Management- Trustees," shall hereinafter be referred to as the "Trustees," the "Board," or the "Board of Trustees") may determine from time to time. The conversion of class C shares to class A shares is subject to the condition that such conversions will not constitute taxable events for federal tax purposes. Shareholders should consult with their tax advisers regarding the state and local tax consequences of the conversion of class C shares to class A shares, or any other exchange or conversion of shares. Prior to March 1, 2021, class C shares converted to class A shares after ten years.

Sales without sales charges or contingent deferred sales charges

In addition to the categories of investors eligible to purchase fund shares without a sales charge or CDSC set forth in the fund's prospectus, in connection with settlements reached between certain firms and the Financial Industry Regulatory Authority ("FINRA") and/or Securities and Exchange Commission (the "SEC") regarding sales of class C shares in excess of certain dollar thresholds, the fund will permit shareholders who are clients of these firms (and applicable affiliates of such firms) to redeem class C shares of the fund and concurrently purchase class A shares (in an amount to be determined by the dealer of record and Franklin Distributors in accordance with the terms of the applicable settlement) without paying a sales charge.

The fund may issue its shares at net asset value without an initial sales charge or a CDSC in connection with the acquisition of substantially all of the securities owned by other investment companies or personal holding companies. The CDSC will be waived on redemptions to pay premiums for insurance under Putnam's insured investor program.

In the case of certain sales charge waivers described in the prospectus to (i) current and former Trustees of the fund, their family members, business and personal associates; current and former employees of the Investment Manager and certain current and former corporate affiliates, their family members, business and personal associates; employer-sponsored retirement plans for the foregoing; and partnerships, trusts or other entities in which any of the foregoing has a substantial interest and (ii) shareholders reinvesting the proceeds from a Putnam Corporate IRA Plan distribution into a nonretirement plan account, the availability of shares at NAV has been determined to be appropriate because involvement by Franklin Distributors and other brokers in purchases by these investors is typically minimal.

As described in the prospectus, specific sales charge waivers may be available through your particular financial intermediary. Please see the prospectus for additional information about financial intermediary-specific waivers.

Application of CDSC to Systematic Withdrawal Plans ("SWP"). The SWP provisions relating to CDSC waivers described below do not apply to customers purchasing shares of the fund through a Specified Intermediary, unless otherwise specified in the Appendix to the fund's prospectus. Please refer to the Appendix to the fund's prospectus for the SWP provisions that are applicable to each Specified Intermediary.

Investors who set up a SWP for a share account (see "INVESTOR SERVICES — Plans Available to Shareholders -- Systematic Withdrawal Plan") may withdraw through the SWP up to 12% of the net asset value of the account (calculated as set forth below) each year without incurring any CDSC. Shares not subject to a CDSC (such as shares representing reinvestment of distributions) will be redeemed first and will count toward the 12% limitation. If there are insufficient shares not subject to a CDSC, shares subject to the lowest CDSC liability will be redeemed next until the 12% limit is reached. The 12% figure is calculated on a pro rata basis at the time of the first payment made pursuant to an SWP and recalculated thereafter on a pro rata basis at the time of each SWP payment. Therefore, shareholders who have chosen an SWP based on a percentage of the net asset value of their account of up to 12% will be able to receive SWP payments without incurring a CDSC. However, shareholders who have chosen a specific dollar amount (for example, $100 per month from the fund that pays income distributions monthly) for their periodic SWP payment should be aware that the amount of that payment not subject to a CDSC may vary over time depending on the net asset value of their account. For example, if the net asset value of the account is $10,000 at the time of payment, the shareholder will receive $100 free of the CDSC (12% of $10,000 divided by 12 monthly payments). However, if at the time of the next payment the net asset value of the account has fallen to $9,400, the shareholder will receive $94 free of any CDSC (12% of $9,400 divided by 12 monthly payments) and $6 subject to the lowest applicable CDSC. This SWP privilege may be revised or terminated at any time.

Other exceptions to application of CDSC. For purposes of the waiver categories set forth in subparagraphs (ii) – (iv) of the fund's prospectus under the sub-section Additional reductions and waivers of sales charges – Class A and class C shares, shares not subject to a CDSC are redeemed first in determining whether the CDSC applies to each redemption.

For purposes of the waiver categories set forth in subparagraph (v) of the fund's prospectus under the sub-section Additional reductions and waivers of sales charges – Class A and Class C shares, Benefit Payments currently include, without limitation, (1) distributions from an IRA due to death or post-purchase disability, (2) a return of excess contributions to an IRA or 401(k) plan, and (3) distributions from retirement plans qualified under Section 401(a) of the Code or from a 403(b) plan due to death, disability, retirement or separation from service. These waivers may be changed at any time.

Ways to Reduce Initial Sales Charges—Class A, Class M and Class N Shares

There are several ways in which an investor may obtain reduced sales charges on purchases of class A shares, class M shares and class N shares. These provisions may be altered or discontinued at any time. The breakpoint discounts described below do not apply to customers purchasing shares of the fund through any of the financial intermediaries specified in the Appendix to the fund's prospectus (each, a "Specified Intermediary"). Please refer to the Appendix to the fund's prospectus for the breakpoint discounts that are applicable to each Specified Intermediary.

Right of accumulation. A purchaser of class A shares, class M shares or class N shares may qualify for a right of accumulation discount by combining all current purchases by such person with the value of certain other shares of any class of Putnam Funds already owned (except Putnam Ultra Short MAC Series). The applicable sales charge is based on the total of:

(i) the investor's current purchase(s); and

(ii) the higher of (x) the maximum offering price (at the close of business on the previous day) or (y) the initial value of total purchases (less the value of shares redeemed on the applicable redemption date) of:

a. all shares held in accounts registered to the investor and other accounts eligible to be linked to the investor's accounts (as described below) in all of the Putnam Funds (except money market funds, unless acquired as described in (b) below); and

b. any shares of money market funds acquired by exchange from other Putnam Funds.

For shares held on December 31, 2007, the initial value will be the value of those shares at the maximum offering price on that date.

The following persons may qualify for a right of accumulation discount:

(i) an individual, or a "company" as defined in Section 2(a)(8) of the Investment Company Act of 1940, as amended (the "1940 Act") (which includes corporations which are corporate affiliates of each other);

(ii) an individual, his or her spouse and their children who were under age 21 at the time of the investor's initial purchase, as well as any individual with an account registered under the same last name and same address as the individual, purchasing for his, her or their own account;

(iii) a trustee or other fiduciary purchasing for a single trust estate or single fiduciary account (including a pension, profit-sharing, or other employee benefit trust created pursuant to a plan qualified under Section 401 of the Code and Simplified Employer Pension Plans (SEPs) created pursuant to Section 408(k) of the Code);

(iv) tax-exempt organizations qualifying under Section 501(c)(3) of the Code, (not including tax-exempt organizations qualifying under Section 403(b)(7) (a "403(b) plan") of the Code; and

(v) employer-sponsored retirement plans of a single employer or of affiliated employers, other than 403(b) plans.

A combined purchase currently may also include shares of any class of other continuously offered Putnam Funds (other than money market funds, Putnam Multi-Asset Income Fund, class A shares of Putnam Ultra Short Duration Income Fund, and Putnam Ultra Short MAC Series) purchased at the same time, if the dealer places the order for such shares directly with Franklin Distributors.

For individual investors, Putnam Investor Services automatically links accounts the registrations of which are under the same last name and address. Account types eligible to be linked for the purpose of qualifying for a right of accumulation discount include the following (in each case as registered to the investor, his or her spouse and his or her children who were under the age of 21 at the time of the investor's initial purchase):

(i) individual accounts;

(ii) joint accounts;

(iii) accounts established as part of a plan established pursuant to Section 403(b) of the Code ("403(b) plans") or an IRA other than a SIMPLE IRA, SARSEP or SEP IRA;

(iv) shares owned through accounts in the name of the investor's (or spouse's or child's) dealer or other financial intermediary (with documentation identifying to the satisfaction of Putnam Investor Services the beneficial ownership of such shares); and

(v) accounts established as part of a Section 529 college savings plan managed by the Investment Manager.

(vi) Shares owned by a plan participant as part of an employer-sponsored retirement plan of a single employer or of affiliated employers (other than 403(b) plans) or a single fiduciary account opened by a trustee or other fiduciary (including a pension, profit-sharing, or other employee benefit trust created pursuant to a plan qualified under Section 401 of the Code) are not eligible for linking to other accounts attributable to such person to qualify for the right of accumulation discount, although all current purchases made by each such plan may be combined with existing aggregate balances of such plan in Putnam Funds for purposes of determining the sales charge applicable to shares purchased at such time by the plan.

To obtain the right of accumulation discount on a purchase through an investment dealer, when each purchase is made the investor or dealer must provide Franklin Distributors with sufficient information to verify that the purchase qualifies for the privilege or discount. The shareholder must furnish this information to Putnam Investor Services when making direct cash investments. Sales charge discounts under a right of accumulation apply only to current purchases. No credit for right of accumulation purposes is given for any higher sales charge paid with respect to previous purchases for the investor's account or any linked accounts.

Statement of Intention. Investors may also obtain the reduced sales charges for class A, class M or class N shares shown in the prospectus for investments of a particular amount by means of a Statement of Intention (also referred to as a Letter of Intention), which expresses the investor's intention to invest that amount (including certain "credits," as described below) within a period of 13 months in shares of any class of the fund or any other continuously offered Putnam Fund (excluding Putnam money market funds, Putnam Multi-Asset Income Fund, Putnam Ultra Short Duration Income Fund, and Putnam Ultra Short MAC Series), including through an account established as part of a Section 529 college savings plan managed by the Investment Manager. Each purchase of class A shares, class M shares or class N shares under a Statement of Intention will be made at the lesser of (i) the offering price applicable at the time of such purchase and (ii) the offering price applicable on the date the Statement of Intention is executed to a single transaction of the total dollar amount indicated in the Statement of Intention.

An investor may receive a credit toward the amount indicated in the Statement of Intention equal to the maximum offering price as of the close of business on the previous day of all shares he or she owns, or which are eligible to be linked for purposes of the right of accumulation described above, on the date of the Statement of Intention which are eligible for purchase under a Statement of Intention (plus any shares of money market funds and Putnam Ultra Short Duration Income Fund acquired by exchange of such eligible shares, and any class N shares of Putnam Ultra Short Duration Income Fund). Investors do not receive credit for shares purchased by the reinvestment of distributions. Investors qualifying for the "combined purchase privilege" (see above) may purchase shares under a single Statement of Intention.

The Statement of Intention is not a binding obligation upon the investor to purchase the full amount indicated. The minimum initial investment under a Statement of Intention is 5% of such amount, and must be invested immediately. Class A shares, class M shares or class N shares purchased with the first 5% of such amount will be held in escrow to secure payment of the higher sales charge applicable to the shares actually purchased if the full amount indicated is not purchased. When the full amount indicated has been purchased, the escrow will be released. If an investor desires to redeem escrowed shares before the full amount has been purchased, the shares will be released from escrow only if the investor pays the sales charge that, without regard to the Statement of Intention, would apply to the total investment made to date.

If an investor purchases more than the dollar amount indicated on the Statement of Intention and qualifies for a further reduced sales charge, the sales charge will be adjusted for the entire amount purchased at the end of the 13-month period, upon recovery by Franklin Distributors from the investor's dealer of its portion of the sales charge adjustment. Once received from the dealer, which may take a period of time or may never occur, the sales charge adjustment will be used to purchase additional shares at the then current offering price applicable to the actual amount of the aggregate purchases. These additional shares will not be considered as part of the total investment for the purpose of determining the applicable sales charge pursuant to the Statement of Intention. No sales charge adjustment will be made unless and until the investor's dealer returns to Franklin Distributors any excess commissions previously received.

If an investor purchases less than the dollar amount indicated on the Statement of Intention within the 13-month period, the sales charge will be adjusted upward for the entire amount purchased at the end of the 13-month period. This adjustment will be made by redeeming shares from the account to cover the additional sales charge, the proceeds of which will be paid to the investor's dealer and Franklin Distributors. Franklin Distributors will make a corresponding downward adjustment to the amount of the reallowance payable to the dealer with respect to purchases made prior to the investor’s failure to fulfill the conditions of the Statement of Intention. If the account exceeds an amount that would otherwise qualify for a reduced sales charge, that reduced sales charge will be applied. Adjustments to sales charges and dealer reallowances will not be made in the case of the shareholder’s death prior to the expiration of the 13-month period.

Statements of Intention are not available for certain employer-sponsored retirement plans.

Statement of Intention forms may be obtained from Franklin Distributors or from investment dealers or may be completed via phone by calling 1-800-225-1581. In addition, shareholders may complete the applicable portion of the fund’s standard account application. Interested investors should read the Statement of Intention carefully.

DISTRIBUTION PLANS

If the fund or a class of shares of the fund has adopted a distribution (12b-1) plan, the prospectus describes the principal features of the plan. This SAI contains additional information which may be of interest to investors.

Continuance of a plan is subject to annual approval by a vote of the Trustees, including a majority of the Trustees who are not interested persons of the fund and who have no direct or indirect interest in the plan or related arrangements (the "Qualified Trustees"), cast in person at a meeting called for that purpose. All material amendments to a plan must be likewise approved by the Trustees and the Qualified Trustees. No plan may be amended in order to increase materially the costs which the fund may bear for distribution pursuant to such plan without also being approved by a majority of the outstanding voting securities of the fund or the relevant class of the fund, as the case may be. A plan terminates automatically in the event of its assignment and may be terminated without penalty, at any time, by a vote of a majority of the Qualified Trustees or by a vote of a majority of the outstanding voting securities of the fund or the relevant class of the fund, as the case may be.

The fund makes payments under each plan to Franklin Distributors to compensate Franklin Distributors for services provided and expenses incurred by it for purposes of promoting the sale of the relevant class of shares, reducing redemptions of shares or maintaining or improving services provided to shareholders by Franklin Distributors and investment dealers.

Franklin Distributors compensates qualifying dealers (including, for this purpose, certain financial institutions) for sales of shares and the maintenance of shareholder accounts.

Franklin Distributors may suspend or modify its payments to dealers. The payments are also subject to the continuation of the relevant distribution plan, the terms of the service agreements between the dealers and Franklin Distributors and any applicable limits imposed by FINRA. Unless noted below or where Franklin Distributors and the applicable dealer have agreed otherwise, these payments commence in the first year after purchase.

Financial institutions receiving payments from Franklin Distributors as described above may be required to comply with various state and federal regulatory requirements, including among others those regulating the activities of securities brokers or dealers.

Except as otherwise agreed between Franklin Distributors and a dealer, for purposes of determining the amounts payable to dealers for shareholder accounts for which such dealers are designated as the dealer of record, "average net asset value" means the product of (i) the average daily share balance in such account(s) and (ii) the average daily net asset value of the relevant class of shares over the quarter.

Class A shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at up to the annual rates set forth below (as a percentage of the average net asset value of class A shares for which such dealers are designated the dealer of record) except as described below. No payments are made during the first year after purchase on shares purchased at net asset value by shareholders that invest at least the amount required to be eligible for the highest sales charge breakpoint as disclosed in the fund's prospectus, unless, in the case of dealers of record for an employer-sponsored retirement plan investing at least $1 million, where such dealer has agreed to a reduced sales commission.

Rate*	Fund
Effective July 1, 2020:	
0.25%	All funds currently making payments under a class A distribution plan, except for those listed below
0.10%	Putnam Ultra Short Duration Income Fund
0.00%	Putnam Government Money Market Fund Putnam Money Market Fund
Prior to July 1, 2020:	
0.25%	All funds currently making payments under a class A distribution plan, except for those listed below
0.20% for shares purchased before 4/1/05; 0.25% for shares purchased on or after 4/1/05	Putnam Strategic Intermediate Municipal Fund
0.20% for shares purchased on or before 12/31/89; 0.25% for shares purchased after 12/31/89	Putnam Convertible Securities Fund George Putnam Balanced Fund Putnam Focused International Equity Fund Putnam Global Health Care Fund
0.20% for shares purchased on or before 3/31/90; 0.25% for shares purchased after 3/31/90	Putnam Mortgage Securities Fund
0.20% for shares purchased on or before 1/1/90; 0.25% for shares purchased after 1/1/90	Putnam Large Cap Value Fund
0.20% for shares purchased on or before 3/31/91; 0.25% for shares purchased after 3/31/91;	Putnam Income Fund
0.10%	Putnam Ultra Short Duration Income Fund
0.00%	Putnam Government Money Market Fund Putnam Money Market Fund

*For purposes of this table, shares are deemed to be purchased on date of settlement (*i.e.*, once purchased and paid for). Shares issued in connection with dividend reinvestments are considered to be purchased on the date of their issuance, not the issuance of the original shares.

Class C shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at the annual rates set forth below (as a percentage of the average net asset value of class C shares for which such dealers are designated the dealer of record). No payments are made during the first year after purchase unless the shares were initially purchased without a CDSC, except that payments for Putnam Money Market Fund, Putnam Government Money Market Fund and Putnam Ultra Short Duration Income Fund will be made beginning in the first year.

Rate	Fund
1.00%	All funds currently making payments under a class C distribution plan, except for those listed below
0.50%	Putnam Government Money Market Fund * Putnam Money Market Fund* Putnam Ultra Short Duration Income Fund

* Putnam Money Market Fund and Putnam Government Money Market Fund limit the 12b-1 fees payable by class C shares to 0.00% of the average net asset value of class C shares for which such dealers are designated the dealer of record.

Different rates may apply to shares sold outside the United States.

Class M shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at the annual rates set forth below (as a percentage of the average net asset value of class M shares for which such dealers are designated the dealer of record).

Rate	Fund
0.65%	George Putnam Balanced Fund
0.40%	Putnam Diversified Income Trust, Putnam High Yield Fund and Putnam Income Fund

Franklin Distributors' payments to dealers for plans investing in class M shares for which such dealers are designated the dealer of record may equal up to the annual rate of 0.75% of the average net asset value of such class M shares for George Putnam Balanced Fund and up to the annual rate of 0.50% of the average net asset value of such class M shares for Putnam Diversified Income Trust, Putnam Global Income Trust, Putnam High Yield Fund, Putnam Income Fund, and Putnam Mortgage Securities Fund.

Different rates may apply to shares sold outside the United States.

Class N shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at the annual rate set forth below (as a percentage of the average net asset value of class N shares for which such dealers are designated the dealer of record).

Rate	Fund
0.25%	All funds currently making payments under a class N distribution plan

Class R shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at up to the annual rate set forth below (as a percentage of the average net asset value of class R shares for which such dealers are designated the dealer of record). No payments are made to dealers during the first year after purchase, with respect to shares purchased before April 1, 2017, if Franklin Distributors paid a commission to the dealer at purchase as described above in "Commissions on Sales to Employee Retirement Plans."

Rate	Fund
0.50%	All funds currently making payments under a class R distribution plan*

***** Putnam Money Market Fund and Putnam Government Money Market Fund limit the 12b-1 fees payable by class R shares to 0.00% of the average net asset value of class R shares for which such dealers are designated the dealer of record.

A portion of the class R distribution fee payable to dealers may be paid to third parties who provide services to plans investing in class R shares, and participants in such plans.

Class R3 shares:

Franklin Distributors makes quarterly (or in certain cases monthly) payments to dealers at up to the annual rate set forth below (as a percentage of the average net asset value of class R3 shares for which such dealers are designated the dealer of record).

Rate	Fund
0.25%	All funds currently making payments under a class R3 distribution plan

A portion of the class R3 distribution fee payable to dealers may be paid to third parties who provide services to plans investing in class R3 shares and participants in such plans.

Additional Dealer Payments

As described earlier in this section, dealers may receive different commissions, sales charge reallowances and other payments with respect to sales of different classes of shares of the funds. These payments may include servicing payments to retirement plan administrators and other institutions up to the same levels as described above. For purposes of this section the term "dealer" includes any broker, dealer, bank, bank trust department, registered investment advisor, financial planner, retirement plan administrator and any other institution having a selling, services, or any similar agreement with Franklin Distributors or one of its affiliates.

Franklin Distributors and its affiliates pay additional compensation to selected dealers under the categories described below. These categories are not mutually exclusive, and a single dealer may receive payments under all categories. These payments may create an incentive for a dealer firm or its representatives to recommend or offer shares of the fund or other Putnam Funds to its customers. These additional payments are made pursuant to agreements with dealers and do not change the price paid by investors for the purchase of a share or the amount a fund will receive as proceeds from such sales or the distribution (12b-1) fees and the expenses paid by the fund as shown under the heading "Fees and Expenses" in the prospectus.

Marketing Support Payments. Franklin Distributors and its affiliates make payments to certain dealers for marketing support services. These payments are individually negotiated with each dealer firm, taking into account the marketing support services provided by the dealer, including business planning assistance, educating dealer personnel about the Putnam Funds and shareholder financial planning needs, placement on the dealer's preferred or recommended fund company list, access to sales meetings, sales representatives and management representatives of the dealer, market data, as well as the size of the dealer's relationship with Franklin Distributors. Franklin Distributors and its affiliates compensate dealers differently depending upon, among other factors, the level and/or type of marketing support provided by the dealer. Payments are generally based on one or more of the following factors: average net assets of Putnam's retail mutual funds attributable to that dealer, gross or net sales of Putnam's retail mutual funds attributable to that dealer, reimbursement of ticket charges (fees that a dealer firm charges its representatives for effecting transactions in fund shares) or a negotiated lump sum payment for services rendered. In addition, payments typically apply to retail sales and assets, but may not, in certain situations, apply to other specific types of sales or assets, such as to retirement plans or fee-based advisory programs.

Although the total of marketing support payments made to dealers in any year may vary, on average, the aggregate payments are not expected, on an annual basis, to exceed 0.085% of the average assets of Putnam's retail mutual funds attributable to the dealers.

The following dealers (and such dealers' respective affiliates) received marketing support payments from Franklin Distributors, Putnam Retail Management Limited Partnership ("Putnam Retail Management") (the funds' principal underwriter prior to August 2, 2024) and their affiliates during the calendar year ended December 31, 2024:

Acadia Life Limited	ADP Retirement Services
Allianz Life Insurance Company	Allstate Life Insurance Company
American Financial Services, Inc.	American General Life Insurance Co.
American United Life Insurance Company	Ameriprise Financial, Inc
Ameritas Life Insurance Corp.	Ascensus, Inc.
Atria Wealth Solutions	AuguStar Life (f/k/a Ohio National Financial Services)
Avantax Wealth Management	AXA Advisors, LLC
Axelus Financial	Benjamin F. Edwards & Company, Inc.
BlackRock Financial Services	Brighthouse Financial
Broadridge Financial Solutions, Inc	Cadaret Grant & Co., Inc.
Cambridge Investment Research, Inc.	Capital Integration System LLC
Cetera Advisors LLC	Cetera Advisor Networks LLC.
Cetera Financial Group	Cetera Financial Specialists LLC.
Cetera Investment Services LLC.	Charles Schwab & Co.
Citigroup Global Markets Inc.	Citizens Securities, Inc.
CMFG Life Insurance Company	Columbia Threadneedle Investments
Commonwealth Financial Network	Corebridge Insurance Company of Bermuda, Ltd
CUNA Brokerage Services, Inc.	CUSO Financial Services, L.P.
Delaware Life Insurance Company	Deutsche Bank
DWC-The 401(K) Experts	E*TRADE Securities LLC.
Edward D. Jones & Co., L.P.	Empower Financial Services
ePlan Services, Inc.	Equitable Holdings, Inc. (f/k/a AXA Advisors, LLC)
Fidelity Investments Institutional Operations Company, Inc.	First Command Financial Planning, Inc.
First Security Benefit Life Insurance and Annuity Company of New York	First Security Benefit Life Insurance Company
Forethought Distributors, LLC	Forethought Life Insurance Company

FPS Services LLC.	FSC Securities Corporation
Genworth Life and Annuity Insurance Company	Goldman, Sachs & Co,
Grove Point Financial	Hantz Financial Services, Inc.
Infinex Investments Inc.	Integrity Life Insurance Company
Janney Montgomery Scott LLC	Jefferson National Life Insurance Company
Jefferson National Life Insurance Company of NY	John Hancock Distributors LLC
JP Morgan Securities LLC	Kestra Investment Services, LLC
LaSalle St. Securities	Lincoln Financial Advisors Corporation
Lincoln Financial Securities Corporation	Lincoln Investment Planning, Inc.
Lincoln National Corporation	Lincoln National Life Insurance Company
Lincoln Retirement Services Company LLC	LPL Financial Holdings Inc.
LPL Financial LLC	Massachusetts Mutual Life Insurance Company
MEMBERS Life Insurance Company	Merrill Lynch
MetLife Insurance Company USA	Midland National Insurance Company
Minnesota Life Insurance Company	MML Investors Services, LLC
Morgan Stanley	National Security Life and Annuity Company
Nationwide Financial Services, Inc.	New York Life Insurance and Annuity Corporation
NEXT Financial Group	Northwestern Mutual Investment Svcs LLC
OneAmerica Financial Partners Inc (f/k/a American United Life Insurance Company)	OneAmerica Retirement Services LLC
Osaic Wealth Inc. (f/k/a Advisor Group Inc.)	Pacific Life Insurance Company
Paychex Securities Corporation	Pershing, LLC
PFS Investments, Inc.	PHL Variable Insurance Company
Phoenix Life Insurance Company	PNC Investments LLC
Principal Financial Group (f/k/a Princor Financial Services)	Protective Life Insurance
Prudential Insurance Company of America	Raymond James & Associates, Inc.
RBC Capital Markets LLC	Reliastar Life Insurance Company of NY
RiverSource Life Insurance Company	Robert W. Baird & Co., Inc.
Royal Alliance Associates	SagePoint Financial, Inc.
Sammons Financial Group, Inc.	Sanctuary Wealth
Securities America, Inc.	Sorrento Pacific Financial, LLC
Stifel Financial Corporation	Symetra Life Insurance Company
Talcott Resolution Life Insurance Company	TD Ameritrade, Inc.
TD Ameritrade Clearing, Inc.	TFS Securities, Inc.
The Guardian Insurance & Annuity Company, Inc.	The Investment Center, Inc.
Thrivent Financial for Lutherans	TIAA-CREF Individual & Institutional Services, LLC
TIFIN Wealth	Transamerica Advisors Life Insurance Company
Triad Advisors LLC	U.S. Bancorp Investments
UBS Financial Services, Inc.	UnionBanc Investment Services, LLC
United States Life Insurance Co. in the City of New York	USI Advisors, Inc.
Valor Financial Securities, LLC	Vanguard Marketing Corporation
Venerable Insurance and Annuity Company	Vestwell Holdings, Inc.
Voya Financial Advisors, LLC	Wells Fargo Advisors, LLC
Wells Fargo Clearing Services, LLC	Western International Securities, Inc.
Wilton Reassurance Life Company of New York	Woodbury Financial Services, Inc.

Additional dealers may receive marketing support payments in 2025 and in future years. Any additions, modifications or deletions to the list of dealers identified above that have occurred since December 31, 2024 are not reflected. You can ask your dealer about any payments it receives from Franklin Distributors and its affiliates or any payments it previously has received from Putnam Retail Management or its affiliates.

Program Servicing Payments. Franklin Distributors and its affiliates also make payments to certain dealers that sell Putnam Fund shares through dealer platforms and other investment programs to compensate dealers for a variety of services they

provide. A dealer may perform program services itself or may arrange with a third party to perform program services. In addition to shareholder recordkeeping, reporting, or transaction processing, program services may include services rendered in connection with dealer platform development and maintenance, fund/investment selection and monitoring, or other similar services. Payments by Franklin Distributors and its affiliates for program servicing support to any one dealer are not expected, with certain limited exceptions, to exceed 0.20% of the total assets in the program on an annual basis. In addition, Franklin Distributors and its affiliates make one-time or annual payments to selected dealers receiving program servicing payments in reimbursement of printing costs for literature for shareholders, account maintenance fees or fees for establishment of Putnam Funds on the dealer's system. The amounts of these payments may, but will not normally (except in cases where the aggregate assets in the program are small), cause the aggregate amount of the program servicing payments to such dealer on an annual basis to exceed the amounts set forth above.

The following dealers (and such dealers' respective affiliates) received program servicing payments from Franklin Distributors, Putnam Retail Management and their affiliates during the calendar year ended December 31, 2024:

Charles Schwab & Co., Inc.	RBC Capital Markets, LLC
Empower Financial Services, Inc.	TD Ameritrade, Inc.
Merrill Lynch, Pierce, Fenner & Smith, Inc.	TD Ameritrade Clearing, Inc.
National Financial Services LLC	Transamerica Advisors Life Insurance Company
Pershing LLC	

Additional or different dealers may also receive program servicing payments in 2025 and in future years. Any additions, modifications or deletions to the list of dealers identified above that have occurred since December 31, 2024 are not reflected. You can ask your dealer about any payments it receives from Franklin Distributors and its affiliates or any payments it previously has received from Putnam Retail Management or its affiliates.

Other Payments. From time to time, Franklin Distributors, at its expense, may provide additional compensation to dealers that sell or arrange for the sale of shares of the fund to the extent not prohibited by laws or the rules of any self-regulatory agency, such as FINRA. Such compensation provided by Franklin Distributors may include financial assistance to dealers that enables Franklin Distributors to participate in and/or present at dealer-sponsored conferences or seminars, sales or training programs for invited registered representatives and other dealer employees, dealer entertainment, and other dealer-sponsored events, and travel expenses, including lodging incurred by registered representatives and other employees in connection with prospecting, retention and due diligence trips. Franklin Distributors makes payments for entertainment events it deems appropriate, subject to Franklin Distributors' internal guidelines and applicable law. These payments may vary upon the nature of the event.

Sub-accounting payments. Certain dealers or other financial intermediaries also receive payments from Putnam Investor Services or its affiliates in recognition of sub-accounting or other services they provide to shareholders or plan participants who invest in the fund or other Putnam Funds through their retirement plan. The amount paid for these services varies depending on the share class selected and by dealer or other financial intermediary, and may also take into account the extent to which the services provided by the dealer replace services that Putnam Investor Services or its affiliates would otherwise have to provide. Payments in respect of class R3 and class R4 shares are generally made at an annual rate of up to 0.25% of a fund's average net assets attributable to such class of shares held by a dealer or other financial intermediary. Payments in respect of class R5 shares are generally made at an annual rate of up to 0.10% of a fund's average net assets attributable to class R5 shares held by a dealer or other financial intermediary, except that an annual rate of up to 0.07% of a fund's average net assets attributable to class R5 shares held by a dealer or other financial intermediary applies to Putnam Dynamic Asset Allocation Conservative Fund, Putnam Global Income Trust, Putnam Income Fund and Putnam Ultra Short Duration Income Fund. There are no such payments in respect of class R6 shares. Payments for other classes vary. See the discussion under the heading "MANAGEMENT – Investor Servicing Agent" for more details.

You can ask your dealer for information about payments it receives from Franklin Distributors or its affiliates and the services it provides for those payments.

MISCELLANEOUS INVESTMENTS, INVESTMENT PRACTICES AND RISKS

As noted in the prospectus, in addition to the main investment strategies and the principal risks described in the prospectus, the fund may employ other investment practices and may be subject to other risks, which are described below. Because the following is a combined description of investment strategies of all of the Putnam Funds, certain matters described herein may not apply to your fund (including those investment strategies identified under the heading *Investment Strategies Applicable to Underlying Funds*, which apply only to the underlying Franklin Advisers or Putnam Management-sponsored exchange-traded funds in which the Putnam Sustainable Retirement Funds invest ("underlying funds"). Unless a strategy or policy described below is specifically prohibited or limited by the investment restrictions discussed in the fund's prospectus or in this SAI, or by applicable law, the fund (and the underlying funds) may engage in each of the practices described below without limit, except as otherwise noted below. This section contains information on the investments and investment practices listed below. With respect to funds for which Franklin Templeton Investment Management Limited ("FTIML"), The Putnam Advisory Company, LLC ("PAC"), Franklin Advisers, and/or Putnam Management serve as sub-adviser (as described in the fund's prospectus), references to the Investment Manager in this section also include FTIML, PAC, Franklin Advisers and Putnam Management, as appropriate.

Artificial Intelligence

Artificial intelligence refers to computer systems that can perform tasks that would otherwise require human intelligence and encompasses various different forms of artificial intelligence, including machine learning models. Artificial intelligence is typically designed to analyze data, learn from patterns and experiences, make decisions, and solve problems. Artificial intelligence can be categorized into two types: narrow artificial intelligence, which is designed for specific tasks, and general artificial intelligence, which has the ability to perform any intellectual task that a human can do and includes generative artificial intelligence ("GAI"). GAI is a type of artificial intelligence technology that produces new text, images, audio, and other content based on training data that includes examples of the desired output.

Typically, users enter questions, queries, or other inputs that prompt the GAI model or tool to produce output. In addition, some software uses GAI to suggest changes, summarize information, or translate text. Artificial intelligence has various applications in many fields such as healthcare, finance, transportation, and law.

The use of artificial intelligence in general may adversely impact markets, the overall performance of the fund's investments, or the services provided to the fund by its service providers. The Investment Manager or a third party service provider may use and/or expand its use of artificial intelligence in connection with its business, operating and investment activities and the fund's investments may also use such technologies. Actual usage of such artificial intelligence will vary, and while the Investment Manager expects it and the fund's third party service provider may, from time to time, adopt and adjust usage policies and procedures governing the use of artificial intelligence by its personnel, there is a risk of misuse of artificial intelligence technologies.

Artificial intelligence is highly reliant on the collection and analysis of large amounts of data and complex algorithms, but it is not possible nor practicable to incorporate all data that would be relevant for a task conducted by artificial intelligence. Therefore, it is possible that the information provided through use of artificial intelligence could be insufficient, incomplete, inaccurate or biased leading to adverse effects for the fund, including, potentially, operational errors and investment losses.

Artificial intelligence and its current and potential future applications, including in the investment and financial sectors, as well as the regulatory frameworks within which they operate, continue to rapidly evolve, and it is impossible to predict the full extent of future applications or regulations. Ongoing and future regulatory actions with respect to artificial intelligence generally or artificial intelligence's use in any industry in particular may alter, perhaps to a materially adverse extent, the ability of the Investment Manager, third-party service provider, a fund or its investments to utilize artificial intelligence in the manner it has to-date, and may have an adverse impact on the ability of any of those entities to continue to operate as intended.

Bank Loans, Loan Participations, and Assignments

The fund may invest in bank loans. Bank loans are typically senior debt obligations of borrowers (issuers) and, as such, are considered to hold a senior position in the capital structure of the borrower. These may include loans that hold the most senior position, that hold an equal ranking with other senior debt, or loans that are, in the judgment of the Investment Manager, in the

category of senior debt of the borrower. This capital structure position generally gives the holders of these loans a priority claim on some or all of the borrower's assets in the event of a default. Many loans are either partially or fully secured by the assets of the borrower, and some impose restrictive covenants which must be met by the borrower, although these covenants have become less common, and the terms of covenants have eroded, in recent years. Loans are typically made by a syndicate of banks, represented by an agent bank which has negotiated and structured the loan and which is responsible generally for collecting interest, principal, and other amounts from the borrower on its own behalf and on behalf of the other lending institutions in the syndicate, and for enforcing its and their other rights against the borrower. Each of the lending institutions, including the agent bank, lends to the borrower a portion of the total amount of the loan, and retains the corresponding interest in the loan.

By purchasing a loan, the fund acquires some or all of the interest of a bank or other lending institution in a loan to a particular borrower. The fund may acquire a loan interest directly by acting as a member of the original lending syndicate. The fund may also invest in a loan in other ways, including through novations, assignments and participating interests. In a novation, the fund assumes all of the rights of a lending institution in a loan, including the right to receive payments of principal and interest and other amounts directly from the borrower and to enforce its rights as a lender directly against the borrower. The fund assumes the position of a co-lender with other syndicate members. In an assignment, the fund purchases a portion of a lender's interest in a loan. In this case, the fund may be required generally to rely upon the assigning bank to demand payment and enforce its rights against the borrower, but would otherwise be entitled to all of such bank's rights in the loan. The fund may also purchase a participating interest in a portion of the rights of a lending institution in a loan. Participation interests typically result in a contractual relationship only with the lending institution, not with the borrower. In such case, the fund will be entitled to receive payments of principal, interest and premium, if any, but will not generally be entitled to enforce its rights directly against the agent bank or the borrower, and must rely for that purpose on the lending institution. In addition, with a participation interest, the fund generally will have no rights of set-off against the borrower, and the fund may not directly benefit from the collateral supporting the loan in which it has purchased the participation.

The fund's ability to receive payments of principal and interest and other amounts in connection with loan interests held by it will depend primarily on the financial condition of the borrower (and, in some cases, the lending institution from which it purchases the loan). Adverse changes in the creditworthiness of the borrower may affect the borrower's ability to pay principal and interest, and borrowers that are in bankruptcy or restructuring may never pay off their indebtedness, or may pay only a small fraction of the amount owed. The value of collateral, if any, securing a loan can decline, or may be insufficient to meet the borrower's obligations or difficult to liquidate. In addition, the fund's access to collateral may be limited by bankruptcy or other insolvency laws. The failure by the fund to receive scheduled interest or principal payments on a loan would adversely affect the income of the fund and would likely reduce the value of its assets, which would be reflected in a reduction in the fund's net asset value. Banks and other lending institutions generally perform a credit analysis of the borrower before originating a loan or participating in a lending syndicate. In selecting the loan interests in which the fund will invest, however, the Investment Manager will not rely solely on that credit analysis, but will perform its own investment analysis of the borrowers. The Investment Manager's analysis may include consideration of the borrower's financial strength and managerial experience, debt coverage, additional borrowing requirements or debt maturity schedules, changing financial conditions, and responsiveness to changes in business conditions and interest rates. The Investment Manager will generally not have access to non-public information to which other investors in syndicated loans may have access. Because loans in which the fund may invest are not generally rated by independent credit rating agencies, a decision by the fund to invest in a particular loan will depend almost exclusively on the Investment Manager's, and the original lending institution's, credit analysis of the borrower. Investments in loans may be of any quality, including "distressed" loans, and will be subject to the fund's credit quality policy. The loans in which the fund may invest include those that pay fixed rates of interest and those that pay floating rates – *i.e.*, rates that adjust periodically based on a known lending rate, such as a bank's prime rate.

The fund will in many cases be required to rely upon the lending institution from which it purchases the loan interest to collect and pass on to the fund such payments and to enforce the fund's rights under the loan. This may subject the fund to greater delays, expenses, and risks than if the fund could enforce its rights directly against the borrower. For example, an insolvency, bankruptcy or reorganization of the lending institution may delay or prevent the fund from receiving principal, interest and other amounts with respect to the underlying loan. When the fund is required to rely upon a lending institution to pay to the fund principal, interest and other amounts received by it, the Investment Manager will also evaluate the creditworthiness of the lending institution.

The borrower of a loan in which the fund holds an interest may, either at its own election or pursuant to terms of the loan documentation, prepay amounts of the loan from time to time. The rate of such prepayments may be affected by, among other things, general business and economic conditions, as well as the financial status of the borrower. Prepayment would cause the

actual duration of a loan to be shorter than its stated maturity. There is no assurance that the fund will be able to reinvest the proceeds of any loan prepayment at the same interest rate or on the same terms as those of the original loan.

Corporate loans in which the fund may invest are generally made to finance internal growth, mergers, acquisitions, stock repurchases, leveraged buy-outs and other corporate activities. A significant portion of the corporate loan interests purchased by the fund may represent interests in loans made to finance highly leveraged corporate acquisitions, known as "leveraged buy-out" transactions, leveraged recapitalization loans and other types of acquisition financing. The highly leveraged capital structure of the borrowers in such transactions may make such loans especially vulnerable to adverse changes in economic or market conditions.

The market for bank loans may not be highly liquid. In addition, loan interests generally are subject to restrictions on transfer, and only limited opportunities may exist to sell such interests in secondary markets. As a result, the fund may be unable to sell loan interests at a time when it may otherwise be desirable to do so or may be able to sell them only at a price that is less than their fair market value. The fund may hold investments in loans for a very short period of time when opportunities to resell the investments that the Investment Manager believes are attractive arise.

Certain of the loan interests acquired by the fund may involve letters of credit, revolving credit facilities, or other standby financing commitments obligating the fund to make additional loans upon demand by the borrower pursuant to the terms specified in the loan documentation. This obligation may have the effect of requiring the fund to increase its investment in a borrower at a time when it would not otherwise have done so. To the extent that the fund is committed to make additional loans under the loan documentation, it will at all times set aside on its books liquid assets in an amount sufficient to meet such commitments.

Certain of the loan interests acquired by the fund may also involve loans made in foreign (*i.e.*, non-U.S.) currencies. The fund's investment in such interests would involve the risks of currency fluctuations described in this SAI with respect to investments in the foreign securities.

With respect to its management of investments in bank loans, the Investment Manager will normally seek to avoid receiving material, non-public information ("Confidential Information") about the issuers of bank loans being considered for acquisition by the fund or held in the fund's portfolio. In many instances, borrowers may offer to furnish Confidential Information to prospective investors, and to holders, of the issuer's loans. The Investment Manager's decision not to receive Confidential Information may place the Investment Manager at a disadvantage relative to other investors in loans (which could have an adverse effect on the price the fund pays or receives when buying or selling loans). Also, in instances where holders of loans are asked to grant amendments, waivers or consent, the Investment Manager's ability to assess their significance or desirability may be adversely affected. For these and other reasons, it is possible that the Investment Manager's decision not to receive Confidential Information under normal circumstances could adversely affect the fund's investment performance.

Notwithstanding its intention generally not to receive material, non-public information with respect to its management of investments in loans, the Investment Manager may from time to time come into possession of material, non-public information about the issuers of loan interests that may be held in the fund's portfolio. Possession of such information may in some instances occur despite the Investment Manager's efforts to avoid such possession, but in other instances the Investment Manager may choose to receive such information (for example, in connection with participation in a creditors' committee with respect to a financially distressed issuer). As, and to the extent, required by applicable law, the Investment Manager's ability to trade in these loan interests for the account of the fund could potentially be limited by its possession of such information. Such limitations on the Investment Manager's ability to trade could have an adverse effect on the fund by, for example, preventing the fund from selling a loan interest that is experiencing a material decline in value. In some instances, these trading restrictions could continue in effect for a substantial period of time.

In some instances, other accounts managed by the Investment Manager or an affiliate may hold other securities issued by borrowers in whose loans the fund may hold an interest. These other securities may include, for example, debt securities that are subordinate to the loan interests held in the fund's portfolio, convertible debt or common or preferred equity securities. In certain circumstances, such as if the credit quality of the issuer deteriorates, the interests of holders of these other securities may conflict with the interests of the holders of the issuer's loans. In such cases, the Investment Manager may owe conflicting fiduciary duties to the fund and other client accounts. The Investment Manager will endeavor to carry out its obligations to all of its clients (including the fund) to the fullest extent possible, recognizing that in some cases certain clients may achieve a lower

economic return, as a result of these conflicting client interests, than if the Investment Manager's client accounts collectively held only a single category of the issuer's securities.

The settlement period (the period between the execution of the trade and the delivery of cash to the purchaser) for some bank loan transactions may be significantly longer than the settlement period for other investments, and in some cases longer than seven days. Requirements to obtain the consent of the borrower and/or agent can delay or impede the fund's ability to sell bank loan interests and can adversely affect the price that can be obtained. It is possible that sale proceeds from bank loan transactions will not be available to meet redemption obligations, in which case the fund may be required to utilize other sources to meet the redemption obligations, such as cash balances or proceeds from the sale of its more liquid investments or investments with shorter settlement periods.

Some loan interests may not be considered "securities" for certain purposes under the federal securities laws, and, as a result, purchasers, such as the fund, may not be entitled to rely on the anti-fraud protections of the federal securities laws.

If legislation or federal or state regulators impose additional requirements or restrictions on the ability of financial institutions to make loans that are considered highly leveraged transactions, the availability of bank loans for investment by a fund may be adversely affected. In addition, such requirements or restrictions could reduce or eliminate sources of financing for certain borrowers. This would increase the risk of default. If legislation or federal or state regulators require financial institutions to dispose of bank loans that are considered highly leveraged transactions or subject such bank loans to increased regulatory scrutiny, financial institutions may determine to sell such bank loans. If a fund attempts to sell a bank loan at a time when a financial institution is engaging in such a sale, the price a fund could get for the bank loan may be adversely affected.

Benchmark Reference Rate Risk

Many debt securities, derivatives, and other financial instruments utilize benchmark or reference rates for variable interest rate calculations, including the Euro Interbank Offer Rate, Sterling Overnight Index Average Rate, and the Secured Overnight Financing Rate (each a "Reference Rate"). Instruments in which the fund invests may pay interest at floating rates based on such Reference Rates or may be subject to interest caps or floors based on such Reference Rates. The fund and issuers of instruments in which the fund invests may also obtain financing at floating rates based on such Reference Rates. The elimination of a Reference Rate or any other changes to or reforms of the determination or supervision of Reference Rates could have an adverse impact on the market for, or value of, any instruments or payments linked to those Reference Rates.

For example, some Reference Rates, as well as other types of rates and indices, are described as "benchmarks" and have been the subject of ongoing national and international regulatory reform, including under the European Union regulation on indices used as benchmarks in financial instruments and financial contracts (known as the "Benchmarks Regulation"). The Benchmarks Regulation has been enacted into United Kingdom law by virtue of the European Union (Withdrawal) Act 2018 (as amended), subject to amendments made by the Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 (SI 2019/657) and other statutory instruments. Following the implementation of these reforms, the manner of administration of benchmarks has changed and may further change in the future, with the result that relevant benchmarks may perform differently than in the past, the use of benchmarks that are not compliant with the new standards by certain supervised entities may be restricted, and certain benchmarks may be eliminated entirely. Such changes could cause increased market volatility and disruptions in liquidity for instruments that rely on or are impacted by such benchmarks. Additionally, there could be other consequences which cannot be predicted.

Borrowing and Other Forms of Leverage

The fund may borrow money to the extent permitted by its investment policies and restrictions and by Section 18 of the 1940 Act. When the fund borrows money, it must pay interest and other fees, which will reduce the fund's returns if such costs exceed the returns on the portfolio securities purchased or retained with such borrowings. In addition, if the fund makes additional investments while borrowings are outstanding, this may be considered a form of leverage.

Leveraging tends to exaggerate the effect of any increase or decrease in the value of the fund's holding. When the fund borrows money or otherwise leverages its portfolio, the value of an investment in the fund will be more volatile and other investment risks will tend to be compounded. Leveraging also may require that the fund liquidate portfolio securities when it may not be advantageous to do so to satisfy its obligations. Leveraging may expose the fund to losses in excess of the amounts invested.

Furthermore, if the fund uses leverage through purchasing derivative instruments, the fund has the risk that losses may exceed the net assets of the fund.

Collateralized Debt and Loan Obligations

The fund may invest in collateralized debt obligations ("CDOs"). CDOs are types of asset-backed securitized instruments and include collateralized loan obligations ("CLOs") and other similarly structured securities. Although certain CDOs may benefit from credit enhancement in the form of a senior-subordinate structure, overcollateralization or bond insurance, such enhancement may not always be present, and may fail to protect a fund against the risk of loss on default of the collateral. CDOs may charge management and administrative fees, which are in addition to those of a fund. CDOs may be less liquid than other types of securities.

The risks of an investment in a CDO largely depend on the type of underlying collateral securities and the tranche in which a fund invests. CDOs are subject to the typical risks associated with debt instruments and fixed income and/or asset-backed securities discussed elsewhere in the prospectus and in this SAI, including interest rate risk (which may be exacerbated if the interest rate payable on a structured financing changes based on multiples of changes in interest rates or inversely to changes in interest rates), prepayment risk, credit risk (including adverse credit spread moves), liquidity risk and market risk. CDOs carry additional risks including, but not limited to: (i) the possibility that distributions from collateral securities will not be adequate to make interest or other payments and one or more tranches may be subject to up to 100% loss of invested capital; (ii) the possibility that the quality of the collateral may decline in value or default, due to factors such as the availability of any credit enhancement, the level and timing of payments and recoveries on and the characteristics of the underlying receivables, loans, or other assets that are being securitized, remoteness of those assets from the originator or transferor, the adequacy of and ability to realize upon any related collateral, and the capability of the servicer of the securitized assets (particularly where the underlying collateral in a loan portfolio is not individually assessed prior to purchase); (iii) market and illiquidity risks affecting the price of a structured finance investment, if required to be sold, at the time of sale; and (iv) if the particular structured product is invested in a security in which a fund is also invested, this would tend to increase the fund's overall exposure to the credit of the issuer of such securities, at least on an absolute, if not on a relative basis. In addition, due to the complex nature of a CDO, an investment in a CDO may not perform as expected. An investment in a CDO also is subject to the risk that the issuer and the investors may interpret the terms of the instrument differently, giving rise to disputes.

A CLO is an obligation of a trust or other special purpose vehicle typically collateralized by a pool of loans, which may include, among others, domestic and foreign senior secured loans, senior unsecured loans, and subordinate corporate loans, including loans that may be rated below investment grade or equivalent unrated loans. CLOs may charge management and other administrative fees. Payments of principal and interest are passed through to investors in a CLO and divided into several tranches of rated debt securities, which vary in risk and yield, and typically at least one tranche of unrated subordinated securities, which may be debt or equity ("CLO Securities"). CLO Securities generally receive some variation of principal and/or interest installments and, with the exception of certain subordinated securities, bear different interest rates. If there are defaults or if a CLO's collateral otherwise underperforms, scheduled payments to senior tranches typically take priority over less senior tranches.

CLO Securities may be privately placed and thus subject to restrictions on transfer to meet securities law and other legal requirements. In the event that any fund does not satisfy certain of the applicable transfer restrictions at any time that it holds CLO Securities, it may be forced to sell the related CLO Securities and may suffer a loss on sale. CLO Securities may be considered illiquid investments in the event there is no secondary market for the CLO Securities. CLOs are also subject to the same risks associated with CDOs, as described above.

Commodities and Commodity-Related Investments

Some funds may gain exposure to commodity markets by investing in physical commodities or commodity-related instruments directly or indirectly. Such instruments include, but are not limited to, futures contracts, swaps, options, forward contracts, and structured notes and equities, debt securities, convertible securities, and warrants of issuers in commodity-related industries.

Commodity prices can be extremely volatile and may be directly or indirectly affected by many factors, including changes in overall market movements, real or perceived inflationary trends, commodity index volatility, changes in interest rates or currency exchange rates, population growth and changing demographics, war, and factors affecting a particular industry or commodity, such as drought, floods, or other weather conditions or natural disasters, livestock disease, trade embargoes, economic

sanctions, competition from substitute products, transportation bottlenecks or shortages, insufficient storage capacity, fluctuations in supply and demand, tariffs, and international regulatory, political, and economic developments (*e.g.*, regime changes and changes in economic activity levels). In addition, some commodities are subject to limited pricing flexibility because of supply and demand factors, and others are subject to broad price fluctuations as a result of the volatility of prices for certain raw materials and the instability of supplies of other materials. Certain commodities (and related derivatives) are also susceptible to price declines due to factors such as supply surpluses caused by global events.

Actions of and changes in governments, and political and economic instability, in commodity-producing and -exporting countries may affect the production and marketing of commodities. In addition, commodity-related industries throughout the world are subject to greater political, environmental, and other governmental regulation than many other industries. Changes in government policies and the need for regulatory approvals may adversely affect the products and services of companies in the commodities industries. For example, the exploration, development, and distribution of coal, oil, and gas in the United States are subject to significant federal and state regulation, which may affect rates of return on coal, oil, and gas and the kinds of services that the federal and state governments may offer to companies in those industries. In addition, compliance with environmental and other safety regulations has caused many companies in commodity-related industries to incur production delays and significant costs. Government regulation also may impede the development of new technologies. The effect of future regulations affecting commodity-related industries cannot be predicted.

The value of commodity-related derivatives fluctuates based on changes in the values of the underlying commodity, commodity index, futures contract, or other economic variable to which they are related. Additionally, economic leverage will increase the volatility of these instruments as they may result in gains or losses greater than the amount invested in the instrument. See “Derivatives,” “Forward Commitments and Dollar Rolls,” “Futures Contracts and Related Options,” “Hybrid Instruments,” "Investments in Wholly-Owned Subsidiaries," “Short Sales,” “Structured Investments,” “Swap Agreements” and “Warrants” herein for more information on the fund’s investments in derivatives, including commodity-related derivatives such as swap agreements, commodity futures contracts, and options on commodity futures contracts.

In order for a fund to qualify as a regulated investment company under Subchapter M of the Internal Revenue Code of 1986, as amended (the “Code”) the fund must derive at least 90 percent of its gross income each taxable year from certain sources of “qualifying income” specified in the Code. Each of Putnam Dynamic Asset Allocation Balanced Fund's, Putnam Dynamic Asset Allocation Conservative Fund's, Putnam Dynamic Asset Allocation Growth Fund's and Putnam Multi-Asset Income Fund's investment in a wholly-owned foreign subsidiary is expected to provide the fund with exposure to the commodities markets within the limitations of the federal income tax requirements of Subchapter M of the Code. Each of Putnam Dynamic Asset Allocation Balanced Fund's, Putnam Dynamic Asset Allocation Conservative Fund's, Putnam Dynamic Asset Allocation Growth Fund's and Putnam Multi-Asset Income Fund's pursuit of its investment strategy may be limited by the fund’s intention to qualify for treatment as a regulated investment company under Subchapter M of the Code. As noted below in “Taxes,” the rules regarding the extent to which annual net income, if any, realized by a wholly-owned foreign subsidiary and included in a fund’s annual income for U.S. federal income tax purposes will constitute “qualifying income” for purposes of the fund’s qualification as a regulated investment company under the Code are unclear and currently under consideration. See the “Investments in Wholly-Owned Subsidiaries” and “Taxes” sections for more information.

Derivatives

Certain of the instruments in which the fund may invest, such as futures contracts, certain foreign currency transactions, options, warrants, hybrid instruments, forward contracts, swap agreements (including credit default swaps and credit default swap indexes) and structured investments, are considered to be “derivatives.” Derivatives are financial instruments whose value depends upon, or is derived from, the value or other attributes of one or more underlying investments, pools of investments, indexes or currencies. Investments in derivatives may be applied toward meeting a requirement to invest in a particular kind of investment if the derivatives have economic characteristics similar to that investment.

The value of derivatives may move in unexpected ways due to unanticipated market movements, the use of leverage, imperfect correlation between the derivative instrument and the reference asset, or other factors, especially in unusual market conditions, and volatility in the value of derivatives could adversely impact the fund’s returns, obligations and exposures. Derivatives may be difficult to value and may increase the fund’s transactions costs. The successful use of derivatives depends on the ability to manage these sophisticated instruments. There is no assurance that the fund’s use of derivative instruments will enable the fund to achieve its investment objective or that the Investment Manager will be able to predict correctly the direction of securities prices, interest rates, currency exchange rates and other economic factors.

The fund's use of derivatives may cause the fund to recognize higher amounts of short-term capital gains, which are generally taxed to individual shareholders at ordinary income tax rates, and higher amounts of ordinary income, and more generally may affect the timing, character and amount of a fund's distributions to shareholders. The fund's use of commodity-linked derivatives can be limited by the fund's intention to qualify as a "regulated investment company" under the Code or bear adversely on the fund's ability to so qualify, as discussed in "Taxes" below.

The fund's use of certain derivatives may in some cases involve forms of financial leverage, which means they provide the fund with investment exposure greater than the value of the fund's investment in the derivatives. The use of leverage involves risk and may increase the volatility of the fund's net asset value.

In its use of derivatives, the fund may take both long positions (the values of which move in the same direction as the prices of the underlying investments, pools of investments, indexes or currencies), and short positions (the values of which move in the opposite direction from the prices of the underlying investments, pools of investments indexes or currencies). Short positions may involve greater risks than long positions, as the risk of loss may be theoretically unlimited (unlike a long position, in which the risk of loss may be limited to the amount invested). The fund may use derivatives that combine "long" and "short" positions in order to capture the difference between underlying investments, pools of investments, indexes or currencies.

Some derivative transactions are required to be centrally cleared and others are available for voluntary clearing. A party to a cleared derivative transaction is subject to the credit and counterparty risk of the clearing house and the clearing member through which it holds its cleared position. Credit risk of market participants with respect to derivatives that are centrally cleared is concentrated in a few clearing houses, and it is not clear how an insolvency proceeding of a clearing house would be conducted and what impact an insolvency of a clearing house would have on the financial system or on the fund's ability to exercise remedies. Also, the fund is subject to risk if it enters into a derivative transaction that is required to be cleared, and no clearing member is willing or able to clear the transaction on the fund's behalf.

Some derivative contracts may be privately negotiated in the over-the-counter market. These contracts also involve exposure to credit risk, since contract performance depends in part on the financial condition of the counterparty, and counterparty risk, since the counterparty may be unable or unwilling to perform its obligations under the contract for reasons unrelated to its financial condition, such as operational issues, business interruptions or contract disputes. If a privately negotiated over-the-counter contract calls for payments by the fund, the fund must be prepared to make the payments when due. If a counterparty's creditworthiness declines or the counterparty is otherwise unable or unwilling to perform its obligations under the contract, the fund may not receive payments owed under the contract, or the payments may be delayed and the value of the agreements with the counterparty may decline, potentially resulting in losses to the fund.

Derivatives also are subject to the risk that the fund may be delayed or prevented from recovering margin or other amounts deposited with a clearinghouse, futures commission merchant or other counterparty. If the fund has insufficient cash, it may have to sell securities to meet margin requirements at a time when it may be disadvantageous to do so.

Other risks arise from the potential inability to terminate or sell derivative positions. Derivatives may be subject to liquidity risk due to the fund's obligation to make payments of margin, collateral, or settlement payments to counterparties. A liquid secondary market may not always exist for the fund's derivative positions. In fact, certain over-the-counter instruments may be considered illiquid, and it may not be possible for the fund to liquidate a derivative position at an advantageous time or price, which may result in significant losses.

Legislation and regulation of derivatives in the U.S. and other countries, including margin, clearing, trading and reporting requirements, and leveraging and position limits, may make derivatives more costly and/or less liquid, limit the availability of certain types of derivatives, cause the fund to change its use of derivatives, or otherwise adversely affect a fund's use of derivatives.

Further information about these instruments and the risks involved in their use is included elsewhere in the prospectus and in this SAI.

Combined Positions

A fund may purchase and write options in combination with each other, or in combination with futures or forward contracts, options on futures contracts, indexed securities, swap agreements or other derivative instruments, to adjust the risk and return

characteristics of its overall position. For example, a fund may purchase a put option and write a call option on the same underlying instrument, in order to construct a combined position whose risk and return characteristics are similar to selling a futures contract. Another possible combined position would involve writing a call option at one strike price and buying a call option at a lower price, in order to reduce the risk of the written call option in the event of a substantial price increase. Because combined options positions involve multiple trades, they result in higher transaction costs and may be more difficult to open and close out.

ESG Considerations

A fund may integrate environmental, social, or governance ("ESG") considerations into its research process and/or investment decision-making. The Investment Manager believes that ESG considerations, like other, more traditional subjects 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 ESG considerations in a fund's process will differ from strategy to strategy, from sector to sector, and from portfolio manager to portfolio manager, and, in some cases (such as where the Investment Manager lacks relevant ESG data), ESG considerations may not represent a material component of a fund's investment process. Other than in the case of Putnam Sustainable Future Fund, Putnam Sustainable Leaders Fund and the Putnam Sustainable Retirement Funds, the consideration of ESG factors as part of a fund's investment process does not mean that a fund pursues a specific "ESG" or "sustainable" investment strategy, and, depending on the fund, the Investment Manager may sometimes make investment decisions other than on the basis of relevant ESG considerations.

Exchange-Traded Notes

The fund may invest in exchange-traded notes ("ETNs"). An ETN is a type of senior, unsecured, unsubordinated debt security whose returns are linked to the performance of a particular market index or other reference assets less applicable fees and expenses. ETNs are listed on an exchange and traded in the secondary market. Investors may hold the ETN until maturity, at which time the issuer is obligated to pay a return linked to the performance of the relevant market index less applicable fees and expenses. ETNs typically do not make periodic interest payments and principal typically is not protected.

The market value of an ETN may be influenced by, among other things, time to maturity, level of supply and demand of the ETN, economic, legal, political or geographic events that affect the reference assets, volatility and lack of liquidity in the reference assets, changes in the applicable interest rates, the current performance of the market index to which the ETN is linked, and the credit rating of the ETN issuer. The market value of an ETN may differ from the performance of the applicable market index, and there may be times when an ETN trades at a premium or discount. This difference in price may be due to the fact that the supply and demand in the market for ETNs at any point in time is not always identical to the supply and demand in the market for the securities underlying the market index that the ETN seeks to track. A change in the issuer's credit rating may also impact the value of an ETN despite the underlying market index remaining unchanged.

ETNs are also subject to tax risk. No assurance can be given that the Internal Revenue Service (the "IRS") will accept, or a court will uphold, how the fund characterizes and treats ETNs for tax purposes.

An ETN that is tied to a specific market index may not be able to replicate and maintain exactly the composition and relative weighting of securities, commodities or other components in the applicable market index. ETNs also incur certain expenses not incurred by their applicable market index, and the fund would bear a proportionate share of any fees and expenses borne by the ETN in which it invests.

The fund's ability to sell its ETN holdings may be limited by the availability of a secondary market. In addition, although an ETN may be listed on an exchange, the issuer may not be required to maintain the listing, and there can be no assurance that a secondary market will exist for an ETN. Some ETNs that use leverage in an effort to amplify the returns of an underlying market index can, at times, be relatively illiquid and may therefore be difficult to purchase or sell at a fair price. Leveraged ETNs may offer the potential for greater return, but the potential for loss and speed at which losses can be realized also are greater. The extent of the fund's investment in commodity-linked ETNs, if any, is limited by tax considerations. For more information regarding the tax treatment of commodity-linked ETNs, please see "Taxes" below.

ETNs are generally similar to structured investments and hybrid instruments. For discussion of these investments and the risks generally associated with them, see "Hybrid Instruments" and "Structured Investments" in this SAI.

Floating Rate and Variable Rate Demand Notes

The fund may purchase taxable or tax-exempt floating rate and variable rate demand notes for short-term cash management or other investment purposes. Floating rate and variable rate demand notes are debt instruments that provide for periodic adjustments in the interest rate. The interest rate on these instruments may be reset daily, weekly or on some other reset period and may have a floor or ceiling on interest rate changes. The interest rate of a floating rate instrument may be based on a known lending rate, such as a bank's prime rate, and is reset whenever such rate is adjusted. The interest rate on a variable rate demand note is reset at specified intervals at a market rate.

Interest rate adjustments are designed to help stabilize the instrument's price or maintain a fixed spread to a predetermined benchmark. While this feature may protect against a decline in the instrument's market price when interest rates or benchmark rates rise, it lowers the fund's income when interest rates or benchmark rates fall. The fund's income from its floating rate and variable rate investments also may increase if interest rates rise. Floating rate and variable rate obligations are less effective than fixed rate instruments at locking in a particular yield. Nevertheless, such obligations may fluctuate in value in response to interest rate changes if there is a delay between changes in market interest rates and the interest reset date for the obligation, or for other reasons.

The fund's ability to receive payments of principal and interest and other amounts in connection with loans held by it will depend primarily on the financial condition of the issuer. The failure by the fund to receive scheduled interest or principal payments on a loan would adversely affect the income of the fund and would likely reduce the value of its assets, which would be reflected in a reduction in the fund's NAV.

Floating rate and variable rate demand notes and bonds may have a stated maturity in excess of one year, but may have features that permit a holder to demand payment of principal plus accrued interest upon a specified number of days' notice. Frequently, such obligations are secured by letters of credit or other credit support arrangements provided by banks. If these obligations are not secured by letters of credit or other credit support arrangements, the fund's right to demand payment will be dependent on the ability of the issuer to pay principal and interest on demand. In addition, these obligations frequently are not rated by credit rating agencies and may involve heightened risk of default by the issuer. The issuer of such obligations normally has a corresponding right, after a given period, to prepay in its discretion the outstanding principal of the obligation plus accrued interest upon a specific number of days notice to the holders. There is no assurance that the fund will be able to reinvest the proceeds of any prepayment at the same interest rate or on the same terms as those of the original instrument.

The absence of an active secondary market for floating rate and variable rate demand notes could make it difficult for the fund to dispose of the instruments, and the fund could suffer a loss if the issuer defaults or during periods in which the fund is not entitled to exercise its demand rights. When a reliable trading market for the floating rate and variable rate instruments held by the fund does not exist and the fund may not demand payment of the principal amount of such instruments within seven days, the instruments may be deemed illiquid and therefore subject to the fund's limitation on investments in illiquid securities.

Foreign Currency Transactions

The fund may engage in foreign currency exchange transactions, including purchasing and selling foreign currency, foreign currency options, foreign currency forward contracts and foreign currency futures contracts and related options. The fund may engage in these transactions for a variety of reasons, including to manage the exposure to foreign currencies inherent in the fund's investments, to increase its returns, and to offset some of the costs of hedging transactions. Foreign currency transactions involve costs, and, if unsuccessful, may reduce the fund's return.

Generally, the fund may engage in both "transaction hedging" and "position hedging" (e.g., the sale of forward currency with respect to portfolio security positions). The fund may also engage in foreign currency transactions for non-hedging purposes, subject to applicable law. When it engages in transaction hedging, the fund enters into foreign currency transactions with respect to specific receivables or payables, generally arising in connection with the fund's purchase or sale of portfolio securities. The fund will engage in transaction hedging when it desires to "lock in" the U.S. dollar price of a security it has agreed to purchase or sell, or the U.S. dollar equivalent of a dividend or interest payment in a foreign currency. By transaction hedging, the fund will attempt to protect itself against a possible loss resulting from an adverse change in the relationship between the U.S. dollar and the applicable foreign currency during the period between the date on which the security is purchased or sold, or on which the dividend or interest payment is earned, and the date on which such payments are made or received. The fund may also engage in position hedging, in which the fund enters into foreign currency transactions on a particular currency with respect to portfolio

positions denominated or quoted in that currency. By position hedging, the fund attempts to protect against a decline in the value relative to the U.S. dollar of the currencies in which its portfolio securities are denominated or quoted (or an increase in the value of the currency in which securities the fund intends to buy are denominated or quoted). While such a transaction would generally offset both positive and negative currency fluctuations, such currency transactions would not offset changes in security values caused by other factors.

The fund may purchase or sell a foreign currency on a spot (*i.e.,* cash) basis at the prevailing spot rate in connection with the settlement of transactions in portfolio securities denominated in that foreign currency or for other hedging or non-hedging purposes. If conditions warrant, for hedging or non-hedging purposes, the fund may also enter into contracts to purchase or sell foreign currencies at a future date ("forward contracts") and purchase and sell foreign currency futures contracts. The fund may also purchase or sell exchange-listed and over-the-counter call and put options on foreign currency futures contracts and on foreign currencies.

A foreign currency futures contract is a standardized exchange-traded contract for the future delivery of a specified amount of a foreign currency at a price set at the time of the contract. Foreign currency futures contracts traded in the United States are designed by and traded on exchanges regulated by the Commodity Futures Trading Commission (the "CFTC"), such as the Chicago Mercantile Exchange, and have margin requirements.

A foreign currency forward contract is a negotiated agreement to exchange currency at a future time, which may be any fixed number of days from the date of the contract as agreed by the parties, at a price set at the time of the contract. The contract price may be higher or lower than the current spot rate. In the case of a cancelable forward contract, the holder has the unilateral right to cancel the contract at maturity by paying a specified fee. Forward foreign currency exchange contracts differ from foreign currency futures contracts in certain respects. For example, the maturity date of a forward contract may be any fixed number of days from the date of the contract agreed upon by the parties, rather than a predetermined date in a given month. Forward contracts may be in any amount agreed upon by the parties rather than predetermined amounts. In addition, forward contracts are traded in the interbank market conducted directly between currency traders (usually large commercial banks) and their customers, so that no intermediary is required. A forward contract generally has no deposit requirement, and no commissions are charged at any stage for trades.

At the maturity of a forward or futures contract, the fund either may accept or make delivery of the currency specified in the contract or otherwise settle the contract, or at or prior to maturity enter into a closing transaction involving the purchase or sale of an offsetting contract. Closing transactions with respect to forward contracts are usually effected with the currency trader who is a party to the original forward contract. Closing transactions with respect to futures contracts may be effected only on a commodities exchange or board of trade which provides a market in such contracts; a clearing corporation associated with the exchange assumes responsibility for closing out such contracts.

Positions in foreign currency futures contracts and related options may be closed out only on an exchange or board of trade that provides a market in such contracts or options. Although the fund intends to purchase or sell foreign currency futures contracts and related options only on exchanges or boards of trade where there appears to be an active market, there is no assurance that a market on an exchange or board of trade will exist for any particular contract or at any particular time. In such event, it may not be possible to close a futures or related option position and, in the event of adverse price movements, the fund would continue to be required to make daily cash payments of variation margin on its futures positions.

The precise matching of the amounts of foreign currency exchange transactions and the value of the portfolio securities involved will not generally be possible since the future value of such securities in foreign currencies will change as a consequence of market movements in the value of those securities between the dates the currency exchange transactions are entered into and the dates they mature. It is also impossible to forecast with precision the market value of portfolio securities at the expiration or maturity of a forward or futures contract. Accordingly, it may be necessary for the fund to purchase additional foreign currency on the spot market (and bear the expense of such purchase) if the market value of the security or securities being hedged is less than the amount of foreign currency the fund is obligated to deliver and a decision is made to sell the security or securities and make delivery of the foreign currency. Conversely, it may be necessary to sell on the spot market some of the foreign currency received upon the sale of the portfolio security or securities if the market value of such security or securities exceeds the amount of foreign currency the fund is obligated to deliver.

As noted above, the fund may purchase or sell exchange-listed and over-the-counter call and put options on foreign currency futures contracts and on foreign currencies. A put option on a futures contract gives the fund the right to assume a short position

in the futures contract until or at the expiration of the option. A put option on a currency gives the fund the right to sell the currency at an exercise price until or at the expiration of the option. A call option on a futures contract gives the fund the right to assume a long position in the futures contract until or at the expiration of the option. A call option on a currency gives the fund the right to purchase the currency at the exercise price until or at the expiration of the option.

Options on foreign currencies operate similarly to options on securities, and are traded primarily in the over-the-counter market, although options on foreign currencies are also listed on several exchanges. Options are traded not only on the currencies of individual nations, but also on the euro, the joint currency of most countries in the European Union.

The fund will only purchase or write foreign currency options when the Investment Manager believes that a liquid secondary market exists for such options. There can be no assurance that a liquid secondary market will exist for a particular option at any specific time. Options on foreign currencies may be affected by all of those factors which influence foreign exchange rates and investments generally.

The fund's currency hedging transactions may call for the delivery of one foreign currency in exchange for another foreign currency and may at times not involve currencies in which its portfolio securities are then denominated. The Investment Manager will engage in such "cross hedging" activities when it believes that such transactions provide significant hedging opportunities for the fund. Cross hedging transactions by the fund involve the risk of imperfect correlation between changes in the values of the currencies to which such transactions relate and changes in the value of the currency or other asset or liability which is the subject of the hedge.

Transaction and position hedging do not eliminate fluctuations in the underlying prices of the securities that the fund owns or intends to purchase or sell. They simply establish a rate of exchange which one can achieve at some future point in time. Additionally, although these techniques tend to minimize the risk of loss due to a decline in the value of the hedged currency, they involve costs to the fund and tend to limit any potential gain which might result from the increase in value of such currency.

The fund may also engage in non-hedging currency transactions. For example, the Investment Manager may believe that exposure to a currency is in the fund's best interest but that securities denominated in that currency are unattractive. In this situation, the fund may purchase a currency forward contract or option in order to increase its exposure to the currency.

In addition, the fund may seek to increase its current return or to offset some of the costs of hedging against fluctuations in current exchange rates by writing covered call options and covered put options on foreign currencies. The fund receives a premium from writing a call or put option, which increases the fund's current return if the option expires unexercised or is closed out at a net profit. The fund may terminate an option that it has written prior to its expiration by entering into a closing purchase transaction in which it purchases an option having the same terms as the option written.

The value of any currency, including U.S. dollars and foreign currencies, may be affected by complex political and economic factors applicable to the issuing country. In addition, the exchange rates of foreign currencies (and therefore the values of foreign currency options, forward contracts and futures contracts and related options) may be affected significantly, fixed, or supported directly or indirectly by U.S. and foreign government actions. Government intervention may increase risks involved in purchasing or selling foreign currency options, forward contracts and futures contracts and related options, since exchange rates may not be free to fluctuate in response to other market forces. The value of a foreign currency option, forward contract or futures contract or related option reflects the value of an exchange rate, which in turn reflects relative values of two currencies -- the U.S. dollar and the foreign currency in question. Although foreign exchange dealers do not charge a fee for currency conversion, they do realize a profit based on the difference (the "spread") between prices at which they are buying and selling various currencies. Thus, a dealer may offer to sell a foreign currency to the fund at one rate, while offering a lesser rate of exchange should the fund desire to resell that currency to the dealer. Because foreign currency transactions occurring in the interbank market involve substantially larger amounts than those that may be involved in the exercise of foreign currency options, forward contracts and futures contracts, the fund may be disadvantaged by having to deal in an odd-lot market for the underlying foreign currencies in connection with options at prices that are less favorable than for round lots. Foreign governmental restrictions or taxes could result in adverse changes in the cost of acquiring or disposing of foreign currencies.

There is no systematic reporting of last sale information for foreign currencies and there is no regulatory requirement that quotations available through dealers or other market sources be firm or revised on a timely basis. Available quotation information is generally representative of very large round-lot transactions in the interbank market and thus may not reflect exchange rates for smaller odd-lot transactions (less than $1 million) where rates may be less favorable. The interbank market in foreign

currencies is a global, around-the-clock market. To the extent that options markets are closed while the markets for the underlying currencies remain open, significant price and rate movements may take place in the underlying markets that cannot be reflected in the options markets.

Numerous regulatory changes related to foreign currency transactions are expected to occur over time and could materially and adversely affect the ability of the fund to enter into foreign currency transactions or could increase the cost of foreign currency transactions. In the future, additional foreign currency transactions may be required to be subject to initial as well as variation margin requirements. Foreign currency transactions that are not centrally cleared are subject to the creditworthiness of the counterparty to the foreign currency transaction (usually large commercial banks), and their values may decline substantially if the counterparty's creditworthiness deteriorates. In a cleared foreign currency transaction, performance of the transaction will be effected by a central clearinghouse rather than by the original counterparty to the transaction. Foreign currency transactions that are centrally cleared will be subject to the creditworthiness of the clearing member and the clearing organization involved in the transaction.

The decision as to whether and to what extent the fund will engage in foreign currency exchange transactions will depend on a number of factors, including prevailing market conditions, the composition of the fund's portfolio and the availability of suitable transactions. There can be no assurance that suitable foreign currency transactions will be available for the fund at any time or that the fund will engage in foreign currency exchange transactions at any time or under any circumstances even if suitable transactions are available to it.

Successful use of currency management strategies will depend on the Investment Manager's skill in analyzing currency values. Currency management strategies may increase the volatility of the fund's returns and could result in significant losses to the fund if currencies do not perform as the Investment Manager anticipates. There is no assurance that the Investment Manager's use of currency management strategies will be advantageous to the fund or that it will hedge at appropriate times.

Foreign Investments and Related Risks

Foreign securities are normally denominated and traded in foreign currencies. As a result, the value of the fund's foreign investments and the value of its shares may be affected favorably or unfavorably by changes in currency exchange rates relative to the U.S. dollar. In addition, the fund is required to compute and distribute its income in U.S. dollars. Therefore, if the exchange rate for a foreign currency declines after a fund's income has been earned and translated into U.S. dollars (but before payment), the fund could be required to liquidate portfolio securities to make such distributions. Similarly, if an exchange rate declines between the time a fund incurs expenses in U.S. dollars and the time such expenses are paid, the amount of such currency required to be converted into U.S. dollars in order to pay such expenses in U.S. dollars will be greater than the equivalent amount in any such currency of such expenses at the time they were incurred.

There may be less information publicly available about a foreign issuer than about a U.S. issuer, and foreign issuers may not be subject to accounting, auditing, custody, disclosure and financial reporting standards and practices comparable to those in the United States. In addition, there may be less (or less effective) regulation of exchanges, brokers and listed companies in some foreign countries. The securities of some foreign issuers are less liquid and at times more volatile than securities of comparable U.S. issuers. Foreign brokerage commissions, custodial expenses and other fees are also generally higher than in the United States.

Foreign settlement procedures and trade regulations may be more complex and involve certain risks (such as delay in payment or delivery of securities or in the recovery of the fund's assets held abroad) and expenses not present in the settlement of investments in U.S. markets. For example, settlement of transactions involving foreign securities or foreign currencies (see below) may occur within a foreign country, and the fund may accept or make delivery of the underlying securities or currency in conformity with any applicable U.S. or foreign restrictions or regulations, and may pay fees, taxes or charges associated with such delivery. In addition, local market holidays or other factors may extend the time for settlement of purchases and sales of the fund's investments in securities that trade on foreign markets. Such investments may also involve the risk that an entity involved in the settlement may not meet its obligations. Extended settlement cycles or other delays in settlement may increase the fund's liquidity risk and require the fund to employ alternative methods (*e.g.*, through borrowings) to satisfy redemption requests during periods of large redemption activity in fund shares.

In addition, foreign securities may be subject to the risk of nationalization or expropriation of assets, imposition of economic sanctions or embargoes (whether imposed by the United States or another country or other governmental or non-governmental

organization), currency exchange controls, foreign withholding or other taxes or restrictions on the repatriation of foreign currency, confiscatory taxation, political, social or financial instability and diplomatic developments which could affect the value of the fund's investments in certain foreign countries. Such actions could result in the devaluation of a country's currency or a decline in the value and liquidity of securities of issuers in that country. In some cases (including in the case of sanctions), such actions also could result in a freeze on an issuer's securities which would prevent the fund from selling securities it holds. Governments of many countries have exercised and continue to exercise substantial influence over many aspects of the private sector through the ownership or control of many companies, including some of the largest in these countries. As a result, government actions in the future could have a significant effect on economic conditions which may adversely affect prices of certain portfolio securities. There is also generally less government supervision and regulation of stock exchanges, brokers, and listed companies than in the United States. Moreover, foreign economies may differ favorably or unfavorably from the U.S. economy in such respects as growth of gross national product, rate of inflation, capital reinvestment, resource self-sufficiency and balance of payments position. Dividends or interest on, or proceeds from the sale of, foreign securities may be subject to foreign withholding or other taxes, and special U.S. tax considerations may apply.

Note on MSCI indices. Due to the potential for foreign withholding taxes, MSCI, Inc. (MSCI) publishes two versions of its indices reflecting the reinvestment of dividends using two different methodologies: gross dividends and net dividends. While both versions reflect reinvested dividends, they differ with respect to the manner in which taxes associated with dividend payments are treated. In calculating the net dividends version, MSCI incorporates reinvested dividends applying the withholding tax rate applicable to foreign non-resident institutional investors that do not benefit from double taxation treaties. The Investment Manager believes that the net dividends version of MSCI indices better reflects the returns U.S. investors might expect were they to invest directly in the component securities of an MSCI index.

Many foreign countries are heavily dependent upon exports, particularly to developed countries, and, accordingly, have been and may continue to be adversely affected by trade barriers, managed adjustments in relative currency values, and other protectionist measures imposed or negotiated by the United States and other countries with which they trade. These economies also have been and may continue to be negatively impacted by economic conditions in the United States and other trading partners, which can lower the demand for goods produced in those countries.

Legal remedies available to investors in certain foreign countries may be more limited than those available with respect to investments in the United States or in other foreign countries. The laws of some foreign countries may limit the fund's ability to invest in securities of certain issuers organized under the laws of those foreign countries. These restrictions may take the form of prior governmental approval requirements, limits on the amount or type of securities held by foreigners and limits on the types of companies in which foreigners may invest (*e.g.*, limits on investment in certain industries). Some countries also limit the investment of foreign persons to only a specific class of securities of an issuer that may have less advantageous terms or rights or preferences than securities of the issuer available for purchase by domestic parties (and such securities may be less liquid than other classes of securities of an issuer), or may directly limit foreign investors' rights (such as voting rights). Although securities subject to such restrictions may be marketable abroad, they may be less liquid than foreign securities of the same class that are not subject to such restrictions. Foreign laws may also impact the availability of derivatives or hedging techniques relating to a foreign country's government securities. In each of these situations, the funds' ability to invest significantly in desired issuers, or the terms of such investments, could be negatively impacted as a result of the relevant legal restriction. Sanctions imposed by the United States government on other countries or persons or issuers operating in such countries could restrict the fund's ability to buy affected securities or to sell any affected securities it has previously purchased, which may subject the fund to greater risk of loss in those securities. Foreign countries may have reporting requirements with respect to the ownership of securities, and those reporting requirements may be subject to interpretation or change without prior notice to investors. No assurance can be given that the fund will satisfy applicable foreign reporting requirements at all times.

For purposes of some foreign holding limits or disclosure thresholds, all positions owned or controlled by the same person or entity, even if in different accounts, may be aggregated for purposes of determining whether the applicable limits or thresholds have been exceeded. Thus, even if the fund does not intend to exceed applicable limits, it is possible that different clients managed by the Investment Manager and its affiliates may be aggregated for this purpose. These limits may adversely affect the fund's ability to invest in the applicable security.

The risks described above, including the risks of nationalization or expropriation of assets, typically are increased in connection with investments in developing countries, also known as "emerging markets." For example, political and economic structures in these countries may be in their infancy and developing rapidly, and such countries may lack the social, political and economic stability characteristic of more developed countries. In such a dynamic environment, there can be no assurance that any or all of

these capital markets will present viable investment opportunities for the fund. Certain of these countries have in the past failed to recognize private property rights and have at times nationalized and expropriated the assets of private companies. In such an event, it is possible that the fund could lose the entire value of its investments in the affected market. High rates of inflation or currency devaluations may adversely affect the economies and securities markets of such countries. In addition, the economies of certain developing or emerging market countries may be dependent on a single industry or limited group of industries, which may increase the risks described above and make those countries particularly vulnerable to global economic and market changes. Investments in emerging markets may be considered speculative.

The currencies of certain emerging market countries have experienced devaluations relative to the U.S. dollar, and future devaluations may adversely affect the value of assets denominated in such currencies. Many emerging market countries have experienced substantial, and in some periods extremely high, rates of inflation for many years, and future inflation may adversely affect the economies and securities markets of such countries. When debt and similar obligations issued by foreign issuers are denominated in a currency (*e.g.*, the U.S. dollar or the Euro) other than the local currency of the issuer, the subsequent strengthening of the non-local currency against the local currency will generally increase the burden of repayment on the issuer and may increase significantly the risk of default by the issuer.

In addition, unanticipated political or social developments may affect the value of investments in emerging markets and the availability of additional investments in these markets. The small size, limited trading volume and relative inexperience of the securities markets in these countries may make investments in securities traded in emerging markets illiquid and more volatile than investments in securities traded in more developed countries, and the fund may be required to establish special custodial or other arrangements before making investments in securities traded in emerging markets. There may be little financial or accounting information available with respect to issuers of emerging market securities, and it may be difficult as a result to assess the value or prospects of an investment in such securities. In certain countries with emerging capital markets, reporting standards vary widely. As a result, traditional investment measurements used in the United States, such as price/earnings ratios, may not be applicable.

Practices in relation to settlement of securities transactions in emerging markets involve higher risks than those in developed markets, in part because the fund may need to use brokers and counterparties that are less well capitalized, and custody and registration of assets in some countries may be unreliable. The possibility of fraud, negligence, undue influence being exerted by the issuer, or refusal to recognize ownership exists in some emerging markets, and, along with other factors, could result in ownership registration being completely lost. The fund would absorb any loss resulting from such registration problems and may have no successful claim for compensation.

American Depositary Receipts ("ADRs") as well as other "hybrid" forms of ADRs, including European Depositary Receipts ("EDRs") and Global Depositary Receipts ("GDRs"), are certificates evidencing ownership of shares of a foreign issuer. These certificates are issued by depository banks and generally trade on an established market in the United States or elsewhere. The underlying shares are held in trust by a custodian bank or similar financial institution in the issuer's home country. The depository bank may not have physical custody of the underlying securities at all times and may charge fees for various services, including forwarding dividends and interest and corporate actions. ADRs are alternatives to directly purchasing the underlying foreign securities in their national markets and currencies. However, ADRs continue to be subject to many of the risks associated with investing in foreign securities.

Certain of the foregoing risks may also apply to some extent to securities of U.S. issuers that are denominated in foreign currencies or that are traded in foreign markets, or securities of U.S. issuers having significant foreign operations or other exposure to foreign markets. If the fund invests in securities issued by foreign issuers, the fund may be subject to the risks described above even if all of the fund's investments are denominated in U.S. dollars, especially with respect to issuers whose revenues are principally earned in a foreign currency but whose debt obligations have been issued in U.S. dollars or other hard currencies.

Investing through Stock Connect. The fund may, directly or indirectly (through, for example, participation notes or other types of equity-linked notes), purchase shares in mainland China-based companies that trade on Chinese stock exchanges such as the Shanghai Stock Exchange and the Shenzhen Stock Exchange ("China A-Shares") through the Shanghai-Hong Kong Stock Connect ("Stock Connect"), or that may be available in the future through additional stock connect programs, a mutual market access program designed to, among other things, enable foreign investment in the People's Republic of China ("PRC") via brokers in Hong Kong.

There are significant risks inherent in investing in China A-Shares through Stock Connect. The underdeveloped state of PRC's investment and banking systems subjects the settlement, clearing, and registration of China A-Shares transactions to heightened risks. Stock Connect can only operate when both PRC and Hong Kong markets are open for trading and when banking services are available in both markets on the corresponding settlement days. As such, if either or both markets are closed on a U.S. trading day, the fund may not be able to dispose of its China A-Shares in a timely manner, which could adversely affect the fund's performance. Because Stock Connect is relatively new, its effects on the market for trading China A-shares are uncertain. In addition, the trading, settlement and information technology ("IT") systems required to operate Stock Connect are relatively new and continuing to evolve. In the event that the relevant systems do not function properly, trading through Stock Connect could be disrupted.

PRC regulations require that, in order to sell its China A-Shares, the fund must pre-deliver the China A-Shares to a broker. If the China A-Shares are not in the broker's possession before the market opens on the day of sale, the sell order will be rejected. This requirement could also limit the fund's ability to dispose of its China A-Shares purchased through Stock Connect in a timely manner. Additionally, Stock Connect is subject to daily quota limitations on purchases of China A Shares. Once the daily quota is reached, orders to purchase additional China A-Shares through Stock Connect will be rejected. The fund's investment in China A-Shares may only be traded through Stock Connect and is not otherwise transferable. Stock Connect utilizes an omnibus clearing structure, and the fund's shares will be registered in its custodian's name on the Central Clearing and Settlement System. This may limit the ability of the Investment Manager to effectively manage the fund, and may expose the fund to the credit risk of its custodian or to greater risk of expropriation. Investment in China A-Shares through Stock Connect may be available only through a single broker that is an affiliate of the fund's custodian, which may affect the quality of execution provided by such broker. Stock Connect restrictions could also limit the ability of the fund to sell its China A-Shares in a timely manner, or to sell them at all. Further, different fees, costs and taxes are imposed on foreign investors acquiring China A-Shares acquired through Stock Connect, and these fees, costs and taxes may be higher than comparable fees, costs and taxes imposed on owners of other securities providing similar investment exposure.

Stock Connect trades are settled in Renminbi ("RMB"), the official currency of PRC, and investors must have timely access to a reliable supply of RMB in Hong Kong, which cannot be guaranteed.

Investing through Bond Connect: Chinese debt instruments trade on the China Interbank Bond Market ("CIBM") and may be purchased through a market access program that is designed to, among other things, enable foreign investment in the PRC ("Bond Connect"). There are significant risks inherent in investing in Chinese debt instruments, similar to the risks of investing in other fixed-income securities in emerging markets. The prices of debt instruments traded on the CIBM may fluctuate significantly due to low trading volume and potential lack of liquidity. The rules to access debt instruments that trade on the CIBM through Bond Connect are relatively new and subject to change, which may adversely affect the fund's ability to invest in these instruments and to enforce its rights as a beneficial owner of these instruments. Trading through Bond Connect is subject to a number of restrictions that may affect the fund's investments and returns. In addition, securities offered through Bond Connect may lose their eligibility for trading through the program at any time. If Bond Connect securities lose their eligibility for trading through the program, they may be sold but can no longer be purchased through Bond Connect. There can be no assurance as to the program's continued existence or whether future developments regarding the program may restrict or adversely affect the fund's investments or returns.

Investments made through Bond Connect are subject to order, clearance and settlement procedures that are relatively untested in China, which could pose risks to the fund. CIBM does not support all trading strategies (such as short selling) and investments in Chinese debt instruments that trade on the CIBM are subject to the risks of suspension of trading without cause or notice, trade failure or trade rejection and default of securities depositories and counterparties. Furthermore, Chinese debt instruments purchased via Bond Connect will be held via a book entry omnibus account in the name of the Hong Kong Monetary Authority Central Money Markets Unit ("CMU") maintained with a China-based depository (either the China Central Depository & Clearing Co. ("CDCC") or the Shanghai Clearing House ("SCH")). The fund's ownership interest in these Chinese debt instruments will not be reflected directly in book entry with CDCC or SCH and will instead only be reflected on the books of the fund's Hong Kong sub-custodian. Therefore, the fund's ability to enforce its rights as a bondholder may depend on CMU's ability or willingness as record-holder of the bonds to enforce the fund's rights as a bondholder. Additionally, the omnibus manner in which Chinese debt instruments are held could expose the fund to the credit risk of the relevant securities depositories and the fund's Hong Kong sub-custodian. While the fund holds a beneficial interest in the instruments it acquires through Bond Connect, the mechanisms that beneficial owners may use to enforce their rights are untested. In addition, courts in China have limited experience in applying the concept of beneficial ownership. Moreover, Chinese debt instruments acquired through Bond Connect generally may not be sold, purchased or otherwise transferred other than through Bond Connect in accordance with applicable rules.

The fund's investments in Chinese debt instruments acquired through Bond Connect are generally subject to a number of regulations and restrictions, including Chinese securities regulations and listing rules, loss recovery limitations and disclosure of interest reporting obligations. The fund will not benefit from access to Hong Kong investor compensation funds, which are set up to protect against defaults of trades, when investing through Bond Connect.

Bond Connect can only operate when both China and Hong Kong markets are open for trading and when banking services are available in both markets on the corresponding settlement days. In addition, the trading, settlement and IT systems required for non-Chinese investors in Bond Connect are relatively new. In the event of systems malfunctions or extreme market conditions, trading via Bond Connect could be disrupted. The rules applicable to taxation of Chinese debt instruments acquired through Bond Connect remain subject to further clarification. Uncertainties in the Chinese tax rules governing taxation of income and gains from investments via Bond Connect could result in unexpected tax liabilities for the fund, which may negatively affect investment returns for shareholder.

Bond Connect trades are settled in RMB, and investors must have timely access to a reliable supply of RMB in Hong Kong, which cannot be guaranteed.

Forward Commitments and Dollar Rolls

The fund may enter into contracts to purchase securities for a fixed price at a future date beyond customary settlement time ("forward commitments"). In the case of to-be-announced ("TBA") purchase commitments, the unit price and the estimated principal amount are established when the fund enters into a contract, with the actual principal amount being within a specified range of the estimate. Forward commitments may be considered securities in themselves, and involve a risk of loss if the value of the security to be purchased declines prior to the settlement date, which risk is in addition to the risk of decline in the value of the fund's other assets. Where such purchases are made through dealers, the fund relies on the dealer to consummate the sale. The dealer's failure to do so may result in the loss to the fund of an advantageous yield or price. Although the fund will generally enter into forward commitments with the intention of acquiring securities for its portfolio or for delivery pursuant to options contracts it has entered into, the fund may dispose of a commitment prior to settlement if the Investment Manager deems it appropriate to do so. The fund may realize short-term profits or losses upon the sale of forward commitments.

The fund may enter into TBA sale commitments to hedge its portfolio positions, to sell securities it owns under delayed delivery arrangements, or to take a short position in mortgage-backed securities. Proceeds of TBA sale commitments are not received until the contractual settlement date. If the TBA sale commitment is closed through the acquisition of an offsetting purchase commitment, the fund realizes a gain or loss on the commitment without regard to any unrealized gain or loss on the underlying security. If the fund delivers securities under the commitment, the fund realizes a gain or loss from the sale of the securities based upon the unit price established at the date the commitment was entered into.

The fund may enter into dollar roll transactions (generally using TBAs) in which it sells a fixed income security for delivery in the current month and simultaneously contracts to purchase similar securities (for example, same type, coupon and maturity) at an agreed upon future time. By engaging in a dollar roll transaction, the fund foregoes principal and interest paid on the security that is sold while the dollar roll is outstanding, but receives the difference between the current sales price and the forward price for the future purchase. In addition, the fund may reinvest the cash proceeds of the sale while the dollar roll is outstanding in an effort to enhance returns. The reinvestment of such proceeds may be considered a form of investment leverage and may increase the fund's risk and volatility. If the income and capital gains from the investment of the cash from the initial sale do not exceed the income, capital appreciation and gain or loss that would have been realized on the securities sold as part of the dollar roll, the use of this technique will result in a lower return than would have been realized without the use of the dollar rolls. The fund accounts for dollar rolls as purchases and sales.

Purchases of securities on a forward commitment basis may involve more risk than other types of purchases. The obligation to purchase securities on a specified future date involves the risk that the market value of the securities that the fund is obligated to purchase may decline below the purchase price. In addition, when entering into a forward commitment transaction, the fund will rely on the other party to consummate the transaction. In the event that the other party files for bankruptcy, becomes insolvent or defaults on its obligation, the fund may be adversely affected. For example, the other party's failure to complete the transaction may result in the loss to the fund of an advantageous yield or price. See also "Legal and Regulatory Risks Relating to Investment Strategy" below.

Futures Contracts and Related Options

Subject to applicable law, the fund may invest in futures contracts and related options for hedging and non-hedging purposes, such as to manage the effective duration of the fund's portfolio or as a substitute for direct investment. A futures contract sale creates an obligation by the seller to sell the type of financial instrument or other asset called for in the contract in a specified month for a stated price. A futures contract purchase creates an obligation by the purchaser to buy the type of financial instrument or other asset called for in the contract in a specified month at a stated price. The specific assets bought or sold, respectively, at settlement date may not be determined until on or near that date. The determination is made in accordance with the rules of the exchange on which the futures contract sale or purchase was made. Futures contracts are traded in the United States only on commodity exchanges or boards of trade -- known as "contract markets" -- approved for such trading by the CFTC, and must be executed through a futures commission merchant (brokerage firm) which is a member of the relevant contract market. Examples of futures contracts that the fund may use include, without limitation, U.S. Treasury futures, index futures, corporate or municipal bond futures, U.S. Government agency futures, interest rate futures, commodities futures, futures contracts on sovereign debt, and Eurodollar futures. In addition, as described elsewhere in this SAI, the fund may use foreign currency futures.

The value of a futures contract tends to increase and decrease in tandem with the value of its underlying asset. Therefore, purchasing futures contracts will tend to increase the fund's exposure to positive and negative price fluctuations in the underlying asset, much as if it had purchased the underlying asset directly. When the fund sells a futures contract, by contrast, the value of its futures position will tend to move in a direction contrary to the market for the underlying asset. Selling futures contracts, therefore, will tend to offset both positive and negative market price changes, much as if the underlying asset had been sold.

When the fund enters into a futures contract, the fund is required to deliver to the futures broker an amount of liquid assets known as "initial margin." The nature of initial margin in futures transactions is different from that of margin in security transactions in that futures contract margin does not involve the borrowing of funds to finance the transactions. Rather, initial margin is similar to a performance bond or good faith deposit in that it is returned to the fund upon termination of the futures contract, assuming all contractual obligations have been satisfied. Initial margin requirements are established by the exchanges on which futures contracts trade and by the fund's broker and may, from time to time, change. Futures contracts also involve brokerage costs. Subsequent payments, called "variation margin" or "maintenance margin," to and from the broker are made on a daily basis as the value of the futures contract fluctuates, a process known as "marking to the market." For example, if the fund purchases a futures contract on an underlying security and the price of that security rises, the value of the futures contract will increase and the fund will receive from the broker a variation margin payment based on that increase in value. Conversely, if the price of the underlying security declines, the value of the futures contract will decrease and the fund will be required to make a variation margin payment to the broker based on that decrease in value. Upon the closing of a futures contract, the fund will receive or be required to pay additional cash based on a final determinations of variation margin.

Although futures contracts by their terms may call for actual delivery or acceptance of commodities or securities, in most cases the contracts are closed out before the settlement date without the making or taking of delivery. Many futures contracts, such as index futures and futures based on the volatility or variance experienced by an index do not call for actual delivery or acceptance of commodities or securities, but instead require cash settlement of the futures contract on the settlement date specified in the contract. Such contracts may also be closed out before the settlement date. The fund may close some or all of its futures positions at any time prior to their expiration. Closing out a futures contract sale is effected by purchasing a futures contract for the same aggregate amount of the specific type of financial instrument or commodity with the same settlement date. If the price of the initial sale of the futures contract exceeds the price of the offsetting purchase, the seller is paid the difference and realizes a gain. Conversely, if the price of the offsetting purchase exceeds the price of the initial sale, the seller realizes a loss. If the fund is unable to enter into a closing transaction, the amount of the fund's theoretical loss is unlimited. The closing out of a futures contract purchase is effected by the purchaser's entering into a futures contract sale. If the offsetting sale price exceeds the purchase price, the purchaser realizes a gain, and if the purchase price exceeds the offsetting sale price, he realizes a loss. Such closing transactions involve additional commission costs.

A portion of any capital gains from futures contracts in which the fund invests directly will be treated for federal income tax purposes as short-term capital gains that, when distributed to taxable shareholders, will be taxable as ordinary income. The fund's investments in futures may cause the fund to recognize income without receiving cash with which to make the distributions necessary to qualify and be eligible for treatment as a regulated investment company and avoid a fund-level tax. The fund may therefore need to liquidate other investments, including when it is not advantageous to do so, to meet its distribution requirement.

With respect to each Putnam Fund other than Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund, the

Investment Manager has claimed an exclusion from the definition of the term “commodity pool operator” under the Commodity Exchange Act (“CEA”) pursuant to Rule 4.5 under the CEA (the “exclusion”) promulgated by the CFTC. Accordingly, the Investment Manager (with respect to these funds) is not subject to registration or regulation as a “commodity pool operator” under the CEA. To remain eligible for the exclusion, each of these funds will be limited in its ability to use certain financial instruments regulated under the CEA (“commodity interests”), including futures, options on futures and certain swaps. In the event that the Investment Manager believes that a fund’s investments in commodity interests exceed the thresholds set forth in the exclusion, the Investment Manager may be required to register as a “commodity pool operator” with the CFTC with respect to that fund. The Investment Manager’s eligibility to claim the exclusion with respect to a fund will be based upon, among other things, the level and scope of the fund’s investment in commodity interests, the purposes of such investments and the manner in which the fund holds out its use of commodity interests. A fund’s ability to invest in commodity interests is limited by the Investment Manager’s intention to operate the fund in a manner that would permit the Investment Manager to continue to claim the exclusion under Rule 4.5, which may adversely affect the fund’s total return. In the event the fund’s investments in commodity interests require the Investment Manager to register with the CFTC as a commodity pool operator with respect to a fund, the fund’s expenses may increase, adversely affecting that fund’s total return, and the commodity pool operators (“CPOs”) of any shareholders that are pooled investment vehicles may be unable to rely on certain CPO registration exemptions.

The Investment Manager is registered as a CPO under the CEA with respect to each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund (the "Commodity Pools"). As a result, additional CFTC-related disclosure, reporting and recordkeeping obligations apply with respect to the Commodity Pools. Compliance with the CFTC's regulatory requirements could increase fund expenses, adversely affecting such fund's total return.

It is not anticipated that Putnam Management, PAC or FTIML will provide commodity trading advice to any of the Subsidiaries (as defined below).

Index futures. An index futures contract is a contract to buy or sell units of an index at a specified future date at a price agreed upon when the contract is made. Entering into a contract to buy units of an index is commonly referred to as buying or purchasing a contract or holding a long position in the index. Entering into a contract to sell units of an index is commonly referred to as selling a contract or holding a short position. A unit is the current value of the index. The fund may enter into stock index futures contracts, debt index futures contracts, or other index futures contracts appropriate to its objective(s). The fund may also purchase and sell options on index futures contracts.

For example, the Standard & Poor’s 500 Composite Stock Price Index (“S&P 500”) is composed of 500 selected U.S. common stocks. The S&P 500 assigns relative weightings to the common stocks that comprise the index, and the value of the index fluctuates with changes in the market values of those common stocks. The stock index futures contract specifies that no delivery of the actual stocks making up the index will take place. Instead, settlement in cash must occur upon the termination of the contract, with the settlement being the difference between the contract price and the actual level of the stock index at the expiration of the contract. For example, if the fund enters into a futures contract to buy 250 units of the S&P 500 at a specified future date at a contract price of $150 and the S&P 500 is at $154 on that future date, the fund will gain $1,000 (250 units x gain of $4). If the fund enters into a futures contract to sell 250 units of the stock index at a specified future date at a contract price of $150 and the S&P 500 is at $152 on that future date, the fund will lose $500 (250 units x loss of $2).

Options on futures contracts. The fund may purchase and write call and put options on futures contracts it may buy or sell and enter into closing transactions with respect to such options to terminate existing positions. Options on futures contracts possess many of the same characteristics as options on securities and indices. An option on a futures contract gives the holder the right, in return for the premium paid to assume a long position (call) or short position (put) in a futures contract at a specified exercise price at any time during the period of the option (in the case of an American-style option) or on the expiration date (in the case of European-style option). After selling a put or call option on a futures contract, the fund will be required to deposit initial margin and variation margin as described above for futures contracts.

When a call option on a futures contract is exercised, the holder acquires a long position in the futures contract and the writer is assigned the opposite short position. When a put option on a futures contract is exercised, the holder acquires a short position in the futures contract and the writer is assigned the opposite long position. When an option is exercised, the delivery of the futures position by the writer of the option to the holder of the option will be accompanied by delivery of the accumulated balance in the writer’s futures margin account, which represents the amount by which the market price of the futures contract, at exercise, exceeds (in the case of a call) or is less than (in the case of a put) the exercise price of the option on the future. If an option is

exercised on the last trading day prior to its expiration date, the settlement will be made entirely in cash equal to the difference between the exercise price of the option and the closing level of the underlying asset on which the future is based on the expiration date. Purchasers of options who fail to exercise their options prior to the exercise date suffer a loss of the premium paid. The holder or writer of an option on a futures contract may terminate its position by selling or purchasing an offsetting option on the same financial instrument (subject to the availability of a liquid market).

The fund may use options on futures contracts in lieu of purchasing or writing options directly on the underlying assets or purchasing and writing the underlying futures contracts. For example, to hedge against a possible decrease in the value of its portfolio securities, the fund may purchase put options or write call options on futures contracts rather than selling futures contracts. Similarly, the fund may purchase call options or write put options on futures contracts as a substitute for the purchase of futures contracts to hedge against a possible increase in the price of securities that the fund expects to purchase. Such options generally operate in the same manner, and involve the same risks, as options purchased or written directly on the underlying investments. As an alternative to purchasing or writing call and put options on index futures, the fund may purchase and write call and put options on the underlying indices themselves. Such options would be used in a manner identical to the use of options on index futures.

Compared to the purchase or sale of futures contracts, the purchase of call or put options on futures contracts generally involves less potential risk to the fund because the maximum amount at risk is the premium paid for the options (plus transaction costs). However, there may be circumstances when the purchase of a call or put option on a futures contract would result in a loss to the fund when the purchase or sale of a futures contract would not (or would result in a smaller loss), such as when there is no movement in the prices of the hedged investments.

The writing of an option on a futures contract involves risks similar to those relating to the purchase or sale of futures contracts (which are described below). In addition, by writing a call option, the fund becomes obligated to sell a futures contract if the option is exercised, which may have a value higher than the exercise price. Similarly, by writing a put option, the fund becomes obligated to purchase a futures contract if the option is exercised, which may have a value lower than the exercise price. The writing of an option on a futures contract generates a premium, which may partially offset an increase (in the case of a written call option) or decrease (in the case of a written put option) in the value of the underlying futures contract. However, the loss incurred by the fund in writing options on futures contracts is potentially unlimited and may exceed the amount of the premium received. The fund will also incur transaction costs in connection with the writing of options on futures contracts.

Risks of transactions in futures contracts and related options. Successful use of futures contracts and options on futures contracts by the fund is subject to the Investment Manager's ability to predict movements in various factors affecting securities markets (or markets for other assets), including interest rates and market movements, and, in the case of index futures and futures based on the volatility or variance experienced by an index, the Investment Manager's ability to predict the future level of the index or the future volatility or variance experienced by an index. For example, it is possible that, where the fund has sold futures contracts to hedge its portfolio against a decline in the market, the index on which the futures contracts are written may advance and the value of securities held in the fund's portfolio, which may differ from those that comprise the index, may decline. If this occurred, the fund would lose money on the futures contracts and experience a decline in value in its portfolio securities. It is also possible that, if the fund has hedged against the possibility of a decline in the market adversely affecting securities held in its portfolio and securities prices increase instead, the fund will lose part or all of the benefit of the increased value of those securities it has hedged because it will have offsetting losses in its futures positions.

The use of futures and options strategies also involves the risk of imperfect correlation among movements in the prices of the securities or other assets underlying the futures contracts and options purchased and sold by the fund, of the futures contracts and options themselves, and, in the case of hedging transactions, of the securities which are the subject of a hedge. To attempt to compensate for imperfect correlations, the fund may purchase or sell futures contracts in a greater amount than the hedged investments if the volatility of the price of the hedged investments is historically greater than the volatility of the futures contracts. Conversely, the fund may purchase or sell fewer futures contracts if the volatility of the price of the hedged investments is historically less than that of the futures contract. In addition to the possibility that there may be an imperfect correlation, or no correlation at all, between movements in the futures contracts used by the fund and the portion of the portfolio being hedged, the prices of futures contracts may not correlate perfectly with movements in the underlying asset due to certain market distortions. First, all participants in the futures market are subject to margin deposit and maintenance requirements. Rather than meeting additional margin deposit requirements, investors may close futures contracts through offsetting transactions which could distort the expected relationship between the underlying asset and futures markets. Second, margin requirements in the futures market are less onerous than margin requirements in the securities market, and as a result the futures market may attract more

speculators than the securities market does. Increased participation by speculators in the futures market may also cause temporary price distortions. Due to the possibility of price distortions in the futures market and also because of the imperfect correlation between movements in the underlying asset and movements in the prices of related futures, even a correct forecast of general market trends by the Investment Manager may still not result in a profitable position. In addition, in the case of hedging transactions, an incorrect correlation could result in a loss on both the hedged securities in the fund and the hedging transactions, so that the portfolio return might have been greater had hedging not been attempted.

The risk of a position in a futures contract may be very large compared to the relatively low level of margin a fund is required to deposit. In many cases, a relatively small price movement in a futures contract may result in immediate and substantial loss or gain to the fund relative to the size of a required margin deposit. In addition, if the fund has insufficient cash, it may have to sell securities to meet daily variation margin requirements at a time when it is disadvantageous to do so. The fund will be required to post margin with its futures commission merchant in connection with its transactions in futures contracts. In the event of an insolvency of the futures commission merchant, the fund may not be able to recover all (or any) of the margin it has posted with the futures commission merchant, or to realize the value of any increase in the price of its positions. The fund also may be delayed or prevented from recovering margin or other amounts deposited with a futures commission merchant or futures clearinghouse.

There is no assurance that higher than anticipated trading activity or other unforeseen events might not, at times, result in the institution by exchanges of special procedures that may interfere with the timely execution of customer orders, for example, by rendering certain market clearing facilities inadequate. For example, futures exchanges may limit the amount of fluctuation permitted in certain futures contract prices during a single trading day. The daily limit establishes the maximum amount that the price of a futures contract may vary either up or down from the previous day's settlement price at the end of the trading session. Once the daily limit has been reached in a futures contract subject to the limit, no more trades may be made on that day at a price beyond that limit. The daily limit governs only price movements during a particular trading day and therefore does not limit potential losses and the limit may work to prevent the liquidation of unfavorable positions. Futures prices have occasionally moved to the daily limit for several consecutive trading days with little or no trading, thereby preventing prompt liquidation of positions and subjecting some holders of futures contracts to substantial losses. In addition, exchanges may cancel trades in limited circumstances, for example, if the exchange believes that allowing such trades to stand as executed could have an adverse impact on the stability or integrity of the market. Any such cancellation may adversely affect the performance of the fund. The fund's futures broker may also limit the fund's ability to invest in certain futures contracts. Such restrictions may adversely affect the fund's performance and its ability to achieve its investment objective.

To reduce or eliminate a position held by the fund, the fund may seek to close out such position. The ability to establish and close out positions will be subject to the development and maintenance of a liquid market. It is not certain that this market will develop or continue to exist for a particular futures contract or option. Reasons for the absence of a liquid market on an exchange include the following: (i) there may be insufficient trading interest in certain contracts or options; (ii) restrictions may be imposed by an exchange on opening transactions or closing transactions or both; (iii) trading halts, suspensions or other restrictions may be imposed with respect to particular classes or series of contracts or options, or underlying securities; (iv) unusual or unforeseen circumstances may interrupt normal operations on an exchange; (v) the facilities of an exchange or a clearing corporation may not at all times be adequate to handle current trading volume; or (vi) one or more exchanges could, for economic or other reasons, decide or be compelled at some future date to discontinue the trading of contracts or options (or a particular class or series of contracts or options), in which event the market on that exchange for such contracts or options (or in the class or series of contracts or options) would cease to exist, although outstanding contracts or options on the exchange that had been issued by a clearing corporation as a result of trades on that exchange would continue to be settled or exercisable in accordance with their terms. If the fund were unable to liquidate a futures contract or an option on a futures contract due to the absence of a liquid market, the imposition of price limits or otherwise, it could incur substantial losses. The fund would continue to be subject to market risk with respect to the position. Also, except in the case of purchased options, the fund would continue to be required to make daily variation margin payments and might be required to maintain a position being hedged by the futures contract or option.

Hybrid Instruments

Hybrid instruments are generally considered derivatives and include indexed or structured securities and combine the elements of futures contracts or options with those of debt, preferred equity, commodity or a depository instrument. A hybrid instrument may be a debt security, preferred stock, warrant, convertible security, certificate of deposit or other evidence of indebtedness on which a portion of or all interest payments, and/or the principal or stated amount payable at maturity, redemption or retirement is

determined by reference to prices, changes in prices, or differences between prices, of securities, currencies, intangibles, goods, articles or commodities (collectively, "underlying assets"), or by another objective index, economic factor or other measure, including interest rates, currency exchange rates, or commodities or securities indices (collectively, "benchmarks").

Hybrid instruments can be an efficient means of creating exposure to a particular market, or segment of a market, with the objective of enhancing total return. For example, a fund may wish to take advantage of expected declines in interest rates in several European countries but avoid the transaction costs associated with buying and currency-hedging the foreign bond positions. One solution would be to purchase a U.S. dollar-denominated hybrid instrument whose redemption price is linked to the average three-year interest rate in a designated group of countries. The redemption price formula would provide for payoffs of less than par if rates were above the specified level. Furthermore, a fund could limit the downside risk of the security by establishing a minimum redemption price so that the principal paid at maturity could not be below a predetermined minimum level if interest rates were to rise significantly. The purpose of this arrangement, known as a structured security with an embedded put option, would be to give the fund the desired European bond exposure while avoiding currency risk, limiting downside market risk, and lowering transaction costs. Of course, there is no guarantee that the strategy will be successful, and the fund could lose money if, for example, interest rates do not move as anticipated or credit problems develop with the issuer of the hybrid instrument.

The risks of investing in hybrid instruments reflect a combination of the risks of investing in securities, options, futures and currencies. An investment in a hybrid instrument may entail significant risks that are not associated with a similar investment in a traditional debt instrument that has a fixed principal amount, is denominated in U.S. dollars or pays interest either at a fixed rate or a floating rate determined by reference to a common, nationally published benchmark. The risks of a particular hybrid instrument will depend upon the terms of the instrument but may include the possibility of significant changes in the benchmark(s) or the prices of the underlying assets to which the instrument is linked. Such risks generally depend upon factors unrelated to the operations or credit quality of the issuer of the hybrid instrument, which may not be foreseen by the purchaser, such as economic and political events, the supply and demand of the underlying assets and interest rate movements. In addition, the various benchmarks and prices for underlying assets can be highly volatile.

Hybrid instruments are potentially more volatile and carry greater market risks than traditional debt instruments. Depending on the structure of the particular hybrid instrument, changes in a benchmark may be magnified by the terms of the hybrid instrument and have an even more dramatic and substantial effect upon the value of the hybrid instrument. Also, the prices of the hybrid instrument and the benchmark or underlying asset may not move in the same direction or at the same time.

Hybrid instruments may bear interest or pay preferred dividends at below market (or even relatively nominal) rates. Alternatively, hybrid instruments may bear interest at above market rates but bear an increased risk of principal loss (or gain). The latter scenario may result if "leverage" is used to structure the hybrid instrument. Leverage risk occurs when the hybrid instrument is structured so that a given change in a benchmark or underlying asset is multiplied to produce a greater value change in the hybrid instrument, thereby magnifying the risk of loss as well as the potential for gain.

If the fund attempts to use a hybrid instrument as a hedge against, or as a substitute for, a portfolio investment, the hybrid instrument may not correlate as expected with the portfolio investment, resulting in losses to the fund. While hedging strategies involving hybrid instruments can reduce the risk of loss, they can also reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other fund investments.

Hybrid instruments may also carry liquidity risk since the instruments are often "customized" to meet the portfolio needs of a particular investor, and therefore, the number of investors that are willing and able to buy such instruments in the secondary market may be smaller than that for more traditional debt securities. Under certain conditions, the redemption value of such an investment could be zero. In addition, because the purchase and sale of hybrid investments could take place in an over-the-counter market without the guarantee of a central clearing organization, or in a transaction between the fund and the issuer of the hybrid instrument, the creditworthiness of the counterparty of the issuer of the hybrid instrument would be an additional risk factor the fund would have to consider and monitor, and the value of the hybrid instrument may decline substantially if the issuer's creditworthiness deteriorates. In addition, uncertainty regarding the tax treatment of hybrid instruments may reduce demand for such instruments. Hybrid instruments also may not be subject to regulation by any governmental regulatory authority, including the regulators typically associated with the derivatives and securities markets such as the CFTC and the SEC.

Illiquid Investments

Each Putnam money market fund will not invest in (a) securities which are not readily marketable, (b) securities restricted as to resale (excluding securities determined by the Trustees of the fund (or the person designated by the Trustees of the fund to make such determinations) to be readily marketable), and (c) repurchase agreements maturing in more than seven days, if, as a result, more than 10% of the fund's net assets (taken at current value) would be invested in securities described in (a), (b) and (c). Rule 22e-4 under the 1940 Act provides that mutual funds (other than money market funds) may not acquire any illiquid investment if, immediately after the acquisition, the fund would have invested more than 15% of its net assets in illiquid investments that are assets. The term "illiquid investment" for this purpose means any investment that a fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without the sale or disposition significantly changing the market value of the investment.

A fund's illiquid investments may be considered speculative and may be difficult to sell. The sale of many of these investments may be prohibited or limited by law or contract. Illiquid investments may be difficult to value for purposes of calculating a fund's net asset value. A fund may not be able to sell illiquid investments when the Investment Manager considers it desirable to do so, or a fund may be able to sell them only at less than their value. The larger size of certain fund holdings and the lack of liquidity in securities markets may limit a fund's ability to sell illiquid investments, or to sell them at appropriate prices, thereby negatively impacting the fund.

Inflation-Protected Securities

The fund may invest in U.S. Treasury Inflation Protected Securities ("U.S. TIPS"), which are fixed income securities issued by the U.S. Department of Treasury, the principal amounts of which are adjusted daily based upon changes in the rate of inflation or deflation. The fund may also invest in other inflation-protected securities issued by non-U.S. governments or by private issuers. Two structures are common. While the U.S. Treasury and some other issuers use a structure that accrues inflation/deflation into the principal value of the bond, many other issuers adjust the coupon accruals for inflation-related changes.

U.S. TIPS pay interest on a semi-annual basis, equal to a fixed percentage of the inflation-adjusted principal amount. The interest rate on these securities is fixed at issuance, but over the life of the security this interest may be paid on an increasing or decreasing principal value that has been adjusted for inflation. U.S. TIPS currently are issued with maturities of five, ten, or thirty years, although it is possible that securities with other maturities will be issued in the future.

Repayment of the original principal upon maturity (as adjusted for inflation) is guaranteed for U.S. TIPS, even during a period of deflation. However, because the principal amount of U.S. TIPS would be adjusted downward during a period of deflation, the fund will be subject to deflation risk with respect to its investments in these securities. In addition, the current market value of U.S. TIPS is not guaranteed, and will fluctuate. If the fund purchases U.S. TIPS in the secondary market whose principal values have been adjusted upward due to inflation since issuance, the fund may experience a loss if there is a subsequent period of deflation. The fund may also invest in other inflation-related securities which may or may not provide a guarantee of principal. If a guarantee of principal is not provided, the adjusted principal value of the security repaid at maturity may be less than the original principal amount.

In addition, inflation-indexed securities do not protect holders from increases in interest rates due to reasons other than inflation (such as changes in currency exchange rates). The periodic adjustment of U.S. TIPS is currently tied to the Consumer Price Index for Urban Consumers ("CPI-U"), which is calculated by the U.S. Department of Treasury. The CPI-U is a measurement of changes in the cost of living, made up of components such as housing, food, transportation and energy. Inflation-protected securities issued by a non-U.S. government are generally adjusted to reflect a comparable inflation index, calculated by that government. There can no assurance that the CPI-U or any non-U.S. inflation index will accurately measure the real rate of inflation in the prices of goods and services. If interest rates rise due to reasons other than inflation (for example, due to changes in currency exchange rates), investors in these securities may not be protected to the extent that the increase is not reflected in the security's inflation measure, which could result in losses to the fund. In addition, there can be no assurance that the rate of inflation in a non-U.S. country will be correlated to the rate of inflation in the United States.

Although inflation-indexed bonds securities may protect their holders from long-term inflationary trends, short-term increases in inflation may result in a decline in value. In general, the value of inflation-protected securities is expected to fluctuate in response to changes in real interest rates, which are in turn tied to the relationship between nominal interest rates and the rate of inflation. Therefore, if inflation were to rise at a faster rate than nominal interest rates, real interest rates might decline, leading to an increase in value of inflation-protected securities. In contrast, if nominal interest rates increased at a faster rate than inflation, real

interest rates might rise, leading to a decrease in value of inflation-protected securities. If inflation is lower than expected during the period the fund holds the security, the fund may earn less on the security than on a conventional bond.

Any increase in principal value is taxable in the year the increase occurs, even though holders do not receive cash representing the increase at that time. As a result, when the fund invests in inflation-protected securities, it could be required at times to liquidate other investments, including when it is not advantageous to do so, in order to satisfy its distribution requirements as a regulated investment company and to eliminate any fund-level income tax liability under the Code.

Initial Public Offerings

The fund may purchase debt or equity securities in initial public offerings ("IPOs"). These securities, which are often issued by unseasoned companies, may be subject to many of the same risks of investing in companies with smaller market capitalizations. Securities issued in an IPO frequently are very volatile in price (and may, therefore, involve greater risk) due to factors such as market psychology prevailing at the time of the IPO, the absence of a prior public market, unseasoned trading, the small number of shares available for trading, and limited availability of information about the issuer. Because of the price volatility of IPO securities, the fund may hold securities purchased in an IPO for a very short period of time. As a result, the fund's investments in IPOs may increase portfolio turnover, which increases brokerage and administrative costs and may result in taxable distributions to shareholders.

There can be no assurance that investments in IPOs will be available to the funds or improve a fund's performance. At any particular time or from time to time the fund may not be able to invest in securities issued in IPOs, or invest to the extent desired because, for example, only a small portion (if any) of the securities being offered in an IPO may be made available to the fund. In addition, under certain market conditions a relatively small number of companies may issue securities in IPOs. Similarly, to the extent that the number of Putnam Funds to which IPO securities are allocated increases, the number of securities issued to any one fund may decrease. The investment performance of the fund during periods when it is unable to invest significantly or at all in IPOs may be lower than during periods when the fund is able to do so. When a fund's asset base is small, a significant portion of the fund's performance could be attributable to investments in IPOs because such investments would have a magnified impact on the fund. As the fund increases in size, the impact of IPOs on the fund's performance will generally decrease.

Interfund Borrowing and Lending

To satisfy redemption requests or to cover unanticipated cash shortfalls, the fund has entered into an Amended and Restated Master Interfund Lending Agreement by and among each Putnam Fund and the Investment Manager (the "Interfund Lending Agreement") under which a Putnam Fund may lend or borrow money (Putnam money market funds may lend, but not borrow) for temporary purposes directly to or from another Putnam Fund (an "Interfund Loan"), subject to meeting the conditions of an SEC exemptive order dated April 10, 2002 (the "Putnam Exemptive Order") granted to the fund permitting such Interfund Loans. All Interfund Loans would consist only of uninvested cash reserves that the lending fund otherwise would invest in short-term repurchase agreements or other short-term instruments. At this time, Putnam Short Term Investment Fund is the only Putnam fund expected to make its uninvested cash reserves available for Interfund Loans.

If the fund has outstanding borrowings, any Interfund Loans to the fund (a) would be at an interest rate equal to or lower than that of any outstanding bank loan, (b) would be secured at least on an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding bank loan that requires collateral, and (c) would have a maturity no longer than any outstanding bank loan (and in any event not over seven days). In addition, if an event of default were to occur under any agreement evidencing an outstanding bank loan to the fund, the event of default would automatically (without need for action or notice by the lending fund) constitute an immediate event of default under the Interfund Lending Agreement entitling the lending fund to call the Interfund Loan (and exercise all rights with respect to any collateral, if any). Such a call would be deemed made if a lending bank exercises its right to call its loan under its agreement with the borrowing fund.

The fund may make an unsecured borrowing under the Interfund Lending Agreement if its outstanding borrowings from all sources immediately after the interfund borrowing total 10% or less of its total assets; provided, that if the fund has a secured loan outstanding from any other lender, including but not limited to another Putnam Fund, the fund's Interfund Loan would be secured on at least an equal priority basis with at least an equivalent percentage of collateral to loan value as any outstanding loan secured by collateral. If (i) the fund's total outstanding borrowings immediately after an interfund borrowing would be greater than 10% of its total assets,(ii) the fund's total outstanding borrowings exceed 10% of its total assets for any reason (such as a decline in net asset value or because of shareholder redemptions), or (iii) the fund has outstanding secured Interfund Loans, the

fund may borrow through the Interfund Lending Agreement on a secured basis only. All secured Interfund Loans would be secured by the pledge of segregated collateral with a market value equal to at least 102% of the outstanding principal value of the Interfund Loan. The fund may not borrow from any source if its total outstanding borrowings immediately after the borrowing would exceed the limits imposed by Section 18 of the 1940 Act or the fund's fundamental investment restrictions.

The fund may not lend to another Putnam Fund under the Interfund Lending Agreement if the Interfund Loan would cause its aggregate outstanding Interfund Loans to exceed 15% of the fund's current net assets at the time of the Interfund Loan. The fund's Interfund Loans to any one fund may not exceed 5% of the lending fund's net assets. The duration of Interfund Loans would be limited to the time required to receive payment for securities sold, but in no event may the duration exceed seven days. Interfund Loans effected within seven days of each other would be treated as separate loan transactions for purposes of this condition. Each Interfund Loan may be called on one business day's notice by a lending fund and may be repaid on any day by a borrowing fund.

The limitations detailed above and the other conditions of the SEC exemptive order permitting interfund lending are designed to minimize the risks associated with interfund lending for both the lending fund and the borrowing fund. However, no borrowing or lending activity is without risk. If the fund borrows money from another fund, there is a risk that the Interfund Loan could be called on one business day's notice or not renewed, in which case the fund may have to borrow from a bank at higher rates if an Interfund Loan were not available from another fund. A delay in repayment to a lending fund could result in a lost opportunity or additional lending costs, and interfund loans are subject to the risk that the borrowing fund could be unable to repay the loan when due. In the case of a default by a borrowing fund and to the extent that the loan is collateralized, the lending fund could take possession of collateral that it is not permitted to hold and, therefore, would be required to dispose of such collateral as soon as possible, which could result in a loss to the lending fund. Because the Investment Manager provides investment management services to both the lending fund and the borrowing fund, the Investment Manager may have a potential conflict of interest in determining whether an Interfund Loan is appropriate for the lending fund and the borrowing fund. The funds and the Investment Manager have adopted policies and procedures that are designed to manage potential conflicts of interest, but the administration of the Interfund Program may be subject to such conflicts.

Inverse Floaters

Inverse floating rate debt securities (or "inverse floaters") are debt securities structured with variable interest rates that reset in the opposite direction from the market rate of interest to which the inverse floater is indexed. An inverse floater may be considered to be leveraged to the extent that its interest rate varies by a magnitude that exceeds the magnitude of the change in the index rate of interest. As a result, inverse floaters may be more volatile and more sensitive to interest rate changes than other types of debt securities with comparable maturities. Inverse floaters may be subject to legal or contractual restrictions on resale and therefore may be less liquid than other types of securities. Certain inverse floaters may be illiquid.

Investments in Wholly-Owned Subsidiaries

Each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund may invest up to 25% of its total assets in its wholly-owned and controlled subsidiary, organized under the laws of the Cayman Islands as an exempted company (each, a "Subsidiary" and collectively, the "Subsidiaries") in order to gain exposure to the commodities markets within the limitations of the federal tax laws, rules and regulations that apply to regulated investment companies.

Generally, each Subsidiary will invest primarily in commodity futures, and swaps on commodity futures, but each Subsidiary may also invest in other commodity-related instruments (such as financial futures, options and swap contracts). Each Subsidiary may also have exposure to equity and fixed income securities, cash and cash equivalents, pooled investment vehicles (including those that are not registered pursuant to the 1940 Act) and other investments, either as investments or to serve as margin or collateral for the Subsidiary's derivative positions. Unlike a fund, the Subsidiary may invest without limitation in commodity-linked derivatives. By investing in a Subsidiary, each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund is indirectly exposed to the risks associated with the Subsidiary's investments. Except as described below, the Subsidiaries are not registered under the 1940 Act and are not subject to all of the investor protections of the 1940 Act. Changes in the laws of the United States and/or the Cayman Islands could result in the inability of the fund and/or the Subsidiary to operate as described in the prospectus and could adversely affect the fund and its shareholders.

The Chief Compliance Officer of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund oversees implementation of each Subsidiary's policies and procedures, and makes periodic reports to the Board regarding each Subsidiary's compliance with its policies and procedures. Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund, Putnam Multi-Asset Income Fund and each Subsidiary test for compliance with investment restrictions on a consolidated basis, except that with respect to its investments in certain securities that may involve leverage, each Subsidiary complies with asset segregation requirements to the same extent as the applicable fund.

Franklin Advisers provides investment management and other services to each Subsidiary. Franklin Advisers does not receive increased compensation by virtue of providing each Subsidiary with investment management or administrative services. The management fee paid by the fund to Franklin Advisers is reduced by an amount equal to the management fee Franklin Advisers receives from the Subsidiary under the management contract between Franklin Advisers and the Subsidiary. Each Subsidiary will also enter into separate contracts for the provision of custody and audit services with the same or with affiliates of the same service providers that provide those services to the applicable fund.

The financial statements of each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund will be consolidated with the financial statements of the applicable Subsidiary in the fund's Annual and Semi-Annual filings on Form N-CSR.

In order for the fund to qualify as a regulated investment company under Subchapter M of the Code the fund must derive at least 90 percent of its gross income each taxable year from certain sources of "qualifying income" specified in the Code. Income from certain commodity-linked derivative instruments in which the fund might invest may not be considered qualifying income. Each of Putnam Dynamic Asset Allocation Balanced Fund's, Putnam Dynamic Asset Allocation Conservative Fund's, Putnam Dynamic Asset Allocation Growth Fund's and Putnam Multi-Asset Income Fund's investment in a Subsidiary is expected to provide the fund with exposure to the commodities markets within the limitations of the federal income tax requirements of Subchapter M of the Code. Each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund's pursuit of its investment strategy may be limited by the fund's intention to qualify for treatment as a regulated investment company under Subchapter M of the Code.

Large Shareholder Transaction Risk

The fund is subject to the risk that shareholders will purchase or redeem large quantities of shares of the fund (such purchases or redemptions, "large shareholder transactions"). The fund may be an investment option for mutual funds that are managed by the Investment Manager and its affiliates as "funds of funds." Additionally, other investors from time to time may make substantial investments in the fund. Such shareholders may at times be considered to control the fund. In addition, a large number of shareholders collectively may purchase or redeem fund shares in large amounts rapidly or unexpectedly. A number of circumstances may cause the fund to experience large shareholder transactions, such as changes in the eligibility criteria for the fund or share class of the fund; liquidations, reorganizations, repositionings, or other announced fund events; or changes in investment objectives, strategies, policies, risks, or investment personnel. Large redemptions may be more likely during times of market stress or reduced liquidity, exacerbating the potential impact on the fund.

Large shareholder transactions may adversely affect the fund's liquidity and net assets. These transactions could adversely affect the fund's performance if the fund is forced to sell portfolio securities to satisfy redemption requests or purchase securities for the portfolio in connection with the investment of subscription proceeds when the fund would otherwise not do so, and at unfavorable prices, which may increase the fund's brokerage costs and accelerate the realization of taxable income and/or gains to shareholders. The effects of taxable income and/or gains resulting from large shareholder transactions would particularly impact non-redeeming shareholders who do not hold their fund shares in an IRA, 401(k) plan or other tax-advantaged plan. To the extent that such transactions result in short-term capital gains, such gains will generally be taxed at the ordinary income tax rate for shareholders who hold fund shares in a taxable account. In addition, fund returns also may be adversely affected if the fund holds a portion of its assets in liquid, cash-like investments in connection with or in anticipation of shareholder redemptions.

Legal and Regulatory Risks Relating to Investment Strategy

The fund may be adversely affected by new (or revised) laws or regulations that may be imposed by the Internal Revenue System or Treasury Department, the CFTC, the SEC, the U.S. Federal Reserve or other banking regulators, or other

governmental regulatory authorities or self-regulatory organizations that supervise the financial markets. These agencies are empowered to promulgate a variety of rules pursuant to financial reform legislation in the United States. The fund may also be adversely affected by changes in the enforcement or interpretation of existing statutes and rules by these governmental regulatory authorities or self-regulatory organizations. It is impossible to predict what, if any, changes in regulations may occur, but any regulation that restricts the ability of the fund to trade in securities or otherwise execute its investment strategy could have a material adverse impact on the fund's performance.

The regulatory environment for funds is evolving, and changes in regulation may adversely affect the value of the investments held by the fund and the ability of the fund to execute its investment strategy. In addition, the securities and derivatives (including futures) markets are subject to comprehensive statutes, regulations and margin requirements. The CFTC, the SEC, the Federal Deposit Insurance Corporation, other regulators and self-regulatory organizations and exchanges are authorized to take extraordinary actions in the event of market emergencies. The regulation of securitization and derivative transactions and funds that engage in such transactions is an evolving area of law and is subject to modification by government, self-regulatory organization and judicial action.

Since 2021, the SEC has proposed and, in some cases, finalized several new rules regarding a wide range of topics related to the fund. For example, the SEC has proposed new rules requiring the reporting and public disclosure of a manager's positions in security-based swaps, including CDS, equity total return swaps and related positions. The SEC has also finalized new rules restricting activities that could be considered to be manipulative in connection with security-based swaps, new rules regarding beneficial ownership and public reporting by managers under Section 13 of the Exchange Act, and new rules requiring the central clearing of certain cash and repurchase transactions involving U.S. Treasuries. These and other proposed new rules, whether assessed on an individual or collective basis, could fundamentally change the current regulatory framework for relevant markets and market participants, including having a material impact on activities of private fund advisers and their funds. While it is currently difficult to predict the full impact of these new rules, these rules could make it more difficult for the fund to execute certain investment strategies and may have a material adverse effect on the fund's ability to generate returns.

In October 2016, the SEC adopted a liquidity risk management rule, Rule 22e-4 under the 1940 Act (the "Liquidity Rule") that requires each fund (other than Putnam money market funds) to establish a liquidity risk management program. The funds have implemented a liquidity risk management program, and the fund's Board of Trustees has appointed the Investment Manager to administer the program. Under the liquidity risk management program, the liquidity risk of each fund is assessed, managed, and periodically reviewed and each portfolio investment held by each fund is classified as a "highly liquid investment," "moderately liquid investment," "less liquid investment" or "illiquid investment." The Liquidity Rule defines "liquidity risk" as the risk that a fund could not meet requests to redeem shares issued by the fund without significant dilution of the remaining investors' interest in the fund. The liquidity of a fund's portfolio investments is determined based on relevant market, trading and investment-specific considerations under the fund's liquidity risk management program. The impact the Liquidity Rule will have on the funds, and on the open-end mutual fund industry in general, is not yet fully known, but the rule could impact a fund's performance and its ability to achieve its investment objective(s). Please see "Illiquid Investments" above for more information.

The U.S. government has enacted legislation that provides for regulation of the derivatives market, including clearing, margin, reporting and registration requirements. The CFTC, SEC, and other federal regulators have adopted and continue to develop rules and regulations enacting the provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). The European Union ("EU"), the United Kingdom ("UK"), and some other countries have implemented and are in the process of implementing similar requirements that affect the fund when it enters into derivative transactions with a counterparty organized in that country or otherwise subject to that country's derivatives regulations. For example, the U.S. government, the EU, the UK and certain other jurisdictions have adopted mandatory minimum variation (and in some cases initial) margin requirements for bilateral derivatives. Such requirements could increase the amount of margin the fund needs to provide in connection with its derivative transactions and, therefore, make derivative transactions more expensive. The regulation of the derivatives markets may make derivatives more costly, may limit the availability or reduce the liquidity of derivatives, or may otherwise adversely affect the value or performance of derivatives. Because these requirements are evolving, their ultimate impact on the fund and the financial system is not yet known. While the rules and regulations like those imposing requirements for margin and central clearing of some derivative transactions are designed to reduce systemic risk (e.g., the risk that the interdependence of large derivatives dealers could cause them to suffer liquidity, solvency or other challenges simultaneously), there is no assurance that they will achieve that result, and, as noted, the requirements can expose the fund to new kinds of costs and risks.

In addition, in October 2020, the SEC adopted Rule 18f-4 under the 1940 Act (the "Derivatives Rule"), regulating the use by registered investment companies of derivatives and many related instruments (e.g. reverse repurchase agreements). The Derivatives Rule requires, among other things, that certain entities adopt a derivatives risk management program, comply with limitations on leverage-related risk based on a "value-at-risk" test and update reporting and disclosure procedures. Funds that use derivative instruments in a limited amount are not subject to the full requirements of the Derivatives Rule. In connection with the adoption of the Derivatives Rule, funds are no longer required to comply with the asset segregation framework arising from prior SEC guidance for covering certain derivative instruments and related transactions.

Regulatory changes also may affect counterparty risk. For example, regulatory requirements may limit the ability of the fund to protect its interests in the event of an insolvency of a derivatives counterparty. In the event of a counterparty's (or its affiliate's) insolvency, the fund's ability to exercise remedies, such as the termination of transactions, netting of obligations and realization on collateral, could be stayed or eliminated under special resolution regimes adopted in the United States, the EU, the UK, and various other jurisdictions. Such regimes provide government authorities with broad authority to intervene when a financial institution is experiencing financial difficulty. In particular, with respect to counterparties who are subject to such proceedings in the EU and the UK, the liabilities of such counterparties to the fund could be reduced, eliminated, or converted to equity in such counterparties (sometimes referred to as a "bail in").

The CFTC and domestic exchanges have established (and continue to evaluate and revise) speculative position limits, referred to as "position limits," on the maximum speculative positions which any person, or group of persons acting in concert, may hold or control in particular futures and options on futures contracts. In addition, federal position limits apply to swaps on agricultural, energy and metals commodities that are "economically equivalent," as defined by the CFTC, to certain futures contracts. Uncertainty surrounding which swaps qualify as "economically equivalent" may result in compliance challenges. An overly broad application of the definition could result in unnecessary restrictions in position sizes, whereas an overly narrow application could risk position limit overages. All positions owned or controlled by the same person or entity, even if in different accounts, must be aggregated for purposes of determining whether the applicable position limits have been exceeded unless an exemption applies. Thus, even if the fund does not intend to exceed applicable position limits, it is possible that positions of different clients managed by the Investment Manager and its affiliates or by any sub-adviser and its affiliates may be aggregated for this purpose. Any modification of trading decisions or elimination of open positions that may be required to avoid exceeding such limits may adversely affect the profitability of the fund. Position limits may adversely affect the fund's ability to hold positions in certain futures contracts and related options and swaps. A violation of position limits could also lead to regulatory action materially adverse to the fund's investment strategy.

The SEC has adopted new rules that require managers to file monthly confidential reports with the SEC regarding equity short sales and related activity. Under the new rules, the SEC will publicly disclose aggregated short position information on a monthly basis. The SEC also adopted a rule that will require reporting and public disclosure of securities loan transaction information (not including party names); this may include, but is not limited to, information about securities loans entered into in connection with short sales. In addition, other non-U.S. jurisdictions where the fund may trade have adopted reporting requirements. If the fund's short positions or its strategy become generally known, the fund's ability to implement its investment strategy could be adversely affected. In particular, other investors could cause a "short squeeze" in the securities held short by the fund forcing the fund to cover its positions at a loss. Such reporting requirements may also limit the fund's ability to access management and other personnel at certain companies where the fund seeks to take a short position. In addition, if other investors engage in copycat behavior by taking positions in the same issuers as the fund, the cost of borrowing securities to sell short could increase drastically and the availability of such securities to the fund could decrease drastically. Such events could make a fund unable to execute its investment strategy. Short sales are also subject to certain SEC regulations. If the SEC were to adopt additional restrictions on short sales, they could restrict the fund's ability to engage in short sales in certain circumstances. The SEC and regulatory authorities in other jurisdictions may adopt (and in certain cases, have adopted) bans on new or increases in short sales of certain securities, including short positions on such securities acquired through swaps, in response to market events. Bans on short selling and such short positions may make it impossible for the fund to execute certain investment strategies and may have a material adverse effect on the fund's ability to generate returns.

In October 2020, the SEC adopted certain regulatory changes and took other actions related to the ability of an investment company to invest in another investment company. These changes include, among other things, amendments to Rule 12d1-1, the rescission of Rule 12d1-2, the adoption of Rule 12d1-4, and the rescission of certain exemptive relief issued by the SEC permitting such investments in excess of statutory limits. These regulatory changes may adversely impact each fund's investment strategies and operations.

Rules implementing the credit risk retention requirements of the Dodd-Frank Act for asset-backed securities require the sponsor of certain securitization vehicles to retain, and to refrain from transferring, selling, conveying to a third party, or hedging 5% of the credit risk in assets transferred, sold, or conveyed through the issuance of such vehicle, subject to certain exceptions. These requirements may increase the costs to originators, securitizers, and, in certain cases, collateral managers of securitization vehicles in which the fund may invest, which costs could be passed along to the fund as an investor in such transactions.

Some EU-regulated institutions (banks, certain investment firms, and authorized managers of alternative investment funds) are currently restricted from investing in securitizations (including U.S.-related securitizations), unless, in summary: (i) the institution is able to demonstrate that it has undertaken certain due diligence in respect of various matters, including its investment position, the underlying assets, and (in the case of authorized managers of alternative investment funds) the sponsor and the originator of the securitization; and (ii) the originator, sponsor, or original lender of the securitization has explicitly disclosed to the institution that it will retain, on an ongoing basis, a net economic interest of not less than five percent of specified credit risk tranches or asset exposures related to the securitization. In the future, EU insurance and reinsurance undertakings and UCITS funds are expected to become subject to similar restrictions. Although the requirements do not apply to the fund directly, the costs of compliance, in the case of any securitization within the EU risk retention rules in which the fund has invested or is seeking to invest, could be indirectly borne by the fund and the other investors in the securitization.

Lower-rated Securities

The fund may invest in lower-rated fixed-income securities (commonly known as "junk bonds") and may hold fixed-income securities that are downgraded to a lower rating after the time of purchase by the fund. Compared to higher-rated fixed-income securities, lower-rated securities generally offer the potential for higher investment returns but subject holders to greater credit, market and liquidity risk, including the possibility of default or bankruptcy. The lower ratings reflect a greater possibility that adverse changes in the financial condition of the issuer or in general economic conditions, or both, or an unanticipated rise in interest rates, may impair the ability of the issuer to make payments of interest and principal. The inability (or perceived inability) of issuers to make timely payment of interest and principal would likely make the values of securities held by the fund more volatile and could limit the fund's ability to sell its securities at prices approximating the values the fund had placed on such securities. The market price of lower-rated securities also generally responds to short-term corporate and market developments to a greater extent than do the price and liquidity of higher-rated securities because such developments are perceived to have a more direct relationship to the ability of an issuer of lower-rated securities to meet its ongoing debt obligations. In addition, the market may be less liquid for lower-rated securities than for higher-rated securities. In the absence of a liquid trading market for securities held by it, the fund at times may be unable to establish the fair value of such securities.

Securities ratings are based largely on the issuer's historical financial condition and the rating agencies' analysis at the time of rating. Consequently, the rating assigned to any particular security is not necessarily a reflection of the issuer's current financial condition, which may be better or worse than the rating would indicate. In addition, the rating assigned to a security by Moody's Investors Service, Inc. or Standard & Poor's (or by any other nationally recognized securities rating agency) does not reflect an assessment of the volatility of the security's market value or the liquidity of an investment in the security. See "SECURITIES RATINGS."

Like those of other fixed-income securities, the values of lower-rated securities fluctuate in response to changes in interest rates. A decrease in interest rates will generally result in an increase in the value of the fund's fixed-income assets. Conversely, during periods of rising interest rates, the value of the fund's fixed-income assets will generally decline. The values of lower-rated securities may often be affected to a greater extent than higher-rated securities by changes in general economic conditions and business conditions affecting the issuers of such securities and their industries. Negative publicity or investor perceptions may also adversely affect the values of lower-rated securities, whether or not justified by fundamental factors. Changes by nationally recognized securities rating agencies in their ratings of any fixed-income security, changes in the ability of an issuer to make payments of interest and principal or regulation that limits the ability of certain categories of financial institutions to invest in lower-rated securities may also affect the value of these investments. Changes in the value of portfolio securities generally will not affect income derived from these securities, but will affect the fund's net asset value. The fund will not necessarily dispose of a security when its rating is reduced below its rating at the time of purchase. However, the Investment Manager will monitor the investment to determine whether its retention will assist in meeting the fund's goal(s).

Lower-rated securities may contain redemption, call or prepayment provisions which permit the issuer of such securities to, at its discretion, redeem the securities. During periods of falling interest rates, issuers of these securities are likely to redeem or prepay the securities and refinance them with debt securities with a lower interest rate. To the extent an issuer is able to

refinance the securities, or otherwise redeem them, the fund may have to replace the securities with a lower yielding security, which would result in a lower return.

Issuers of lower-rated fixed-income securities may be (i) in poor financial condition, (ii) experiencing poor operating results, (iii) having substantial capital needs or negative net worth, or (iv) facing special competitive or product obsolescence problems, and may include companies involved in bankruptcy or other reorganizations or liquidation proceedings. Issuers of lower-rated securities are also often highly leveraged, and their relatively high debt-to-equity ratios increase the risk that their operations may not generate sufficient cash flow to service their debt obligations, especially during an economic downturn or during sustained periods of rising interest rates. Such issuers may not have more traditional methods of financing available to them and may be unable to repay outstanding obligations at maturity by refinancing. The risk of loss due to default in payment of interest or repayment of principal by issuers of lower-rated securities is significantly greater than for issuers of higher-rated securities because such securities frequently are unsecured and subordinated to the prior payment of senior indebtedness.

At times, a substantial portion of the fund's assets may be invested in an issue of which the fund, by itself or together with other funds and accounts managed by the Investment Manager or its affiliates, holds all or a major portion. Although the Investment Manager generally considers such securities to be liquid because of the availability of an institutional market for such securities, it is possible that, under adverse market or economic conditions or in the event of adverse changes in the financial condition of the issuer, the fund could find it more difficult to sell these securities when the Investment Manager believes it advisable to do so or may be able to sell the securities only at prices lower than if they were more widely held. Under these circumstances, it may also be more difficult to determine the fair value of such securities for purposes of computing the fund's net asset value. In order to enforce its rights in the event of a default, the fund may be required to participate in various legal proceedings or take possession of and manage assets securing the issuer's obligations on such securities. This could increase the fund's operating expenses and adversely affect the fund's net asset value. In the case of tax-exempt funds, any income derived from the fund's ownership or operation of such assets would not be tax-exempt. The ability of a holder of a tax-exempt security to enforce the terms of that security in a bankruptcy proceeding may be more limited than would be the case with respect to securities of private issuers. In addition, the fund's intention to qualify as a "regulated investment company" under the Code may limit the extent to which the fund may exercise its rights by taking possession of such assets.

To the extent the fund invests in lower-rated securities, the achievement of the fund's goals is more dependent on the Investment Manager's investment analysis than would be the case if the fund were investing in higher-rated securities.

Market Risk

The value of securities in a fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political or financial market conditions, investor sentiment and market perceptions (including perceptions about monetary policy, interest rates or the risk of default), government actions (including protectionist measures, intervention in the financial markets or other regulation, and changes in fiscal, monetary or tax policies), geopolitical events or changes (including natural disasters, epidemics or pandemics, terrorism and war), and factors related to a specific issuer, geography, industry or sector. In addition, the increasing popularity of passive index-based investing may have the potential to increase security price correlations and volatility. (As passive strategies generally buy or sell securities based simply on inclusion and representation in an index, securities prices will have an increasing tendency to rise or fall based on whether money is flowing into or out of passive strategies rather than based on an analysis of the prospects and valuation of individual securities. This may result in increased market volatility as more money is invested through passive strategies). During a general downturn in financial markets, multiple asset classes may decline in value simultaneously. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings, particularly for larger investments. During those periods, the fund may experience high levels of shareholder redemptions, and may have to sell securities at times when it would otherwise not do so, and at unfavorable price.

Legal, political, regulatory and tax changes may cause fluctuations in markets and securities prices. In the past, governmental and non-governmental issuers have defaulted on, or have been forced to restructure, their debts, and many other issuers have faced difficulties obtaining credit. Defaults or restructurings by governments or others of their debts could have substantial adverse effects on economies, financial markets, and asset valuations around the world. In addition, financial regulators, including the U.S. Federal Reserve and the European Central Bank, at times have taken steps to maintain historically low interest rates, such as by purchasing bonds. Some governmental authorities at times have taken steps to devalue their currencies substantially or have taken other steps to counter actual or anticipated market or other developments. Steps by those regulators and authorities to implement, or to curtail or taper, these activities could have substantial negative effects on financial

markets. The withdrawal of support, failure of efforts in response to a financial crisis, or investor perception that these efforts are not succeeding could negatively affect financial markets generally as well as the values and liquidity of certain securities.

The fund is subject to the risk that geopolitical events will disrupt securities markets and adversely affect global economies and markets. War, terrorism, economic uncertainty, and other geopolitical events (including sanctions, tariffs, exchange controls or other cross-border trade barriers) have led, and in the future may lead, to increased short-term market volatility and may have adverse long-term effects on U.S. and world economies and markets generally. In addition, trade disputes (such as the "trade war" between the United States and China that intensified in 2018 and 2019) may affect investor and consumer confidence and may adversely impact financial markets and the broader economy, perhaps suddenly and to a significant degree. Events such as these and their impact on the fund are difficult to predict. For example, Russia's military invasion of Ukraine in February 2022 resulted in the United States, other countries, and certain international organizations levying broad economic sanctions against Russia and Russian individuals. These sanctions and any additional sanctions or other intergovernmental actions that may be undertaken against Russia in the future may result in the devaluation of the ruble, a downgrade in the country's credit rating, and a decline in the value and liquidity of Russian securities. Such actions could result in a freeze of Russian securities, impairing the ability of a fund to buy, sell, receive, or deliver those securities. Retaliatory action by the Russian government could involve the seizure of U.S. and/or European residents' assets, and any such actions are likely to impair the value and liquidity of such assets. Any or all of these potential results could have an adverse/recessionary effect on Russia's economy. All of these factors could have a negative effect on the performance of funds that have significant exposure to Russia.

In addition, the extent and duration of the military action associated with Russia's invasion of Ukraine, resulting sanctions and resulting future market disruptions, including declines in Russian stock markets and the value of the ruble against the U.S. dollar, are impossible to predict, but could be significant. Any disruptions caused by such military action or other actions (including cyberattacks and espionage) or resulting actual and threatened responses to such activity, including purchasing and financing restrictions, boycotts or changes in consumer or purchaser preferences, sanctions, tariffs or cyberattacks on the Russian government, Russian companies, or Russian individuals, including politicians, may negatively impact Russia's economy and Russian issuers of securities in which the fund invests. Actual and threatened responses to such military action may also impact the markets for certain Russian commodities, such as oil and natural gas, as well as other sectors of the Russian economy, and may likely have collateral impacts on such sectors globally. These and any related events could have a significant impact on fund performance and the value of an investment in the fund.

Likewise, natural and environmental disasters, epidemics or pandemics, and systemic market dislocations may be highly disruptive to economies and markets, and may result in significant market volatility, exchange trading suspensions or closures, or a substantial economic downturn or recession. Those events, as well as other changes in foreign and domestic economic and political conditions, also could disrupt the operations of the fund or its service providers or adversely affect individual issuers or related groups of issuers, interest rates, credit ratings, default rates, inflation, supply chains, consumer demand, investor sentiment, and other factors affecting the value or liquidity of the fund's investments.

An outbreak of respiratory disease caused by a novel coronavirus designated as COVID-19 was first detected in China in December 2019 and subsequently spread internationally. The transmission of COVID-19 and efforts to contain its spread have resulted in, among other things, border closings and other significant travel restrictions and disruptions; significant disruptions to business operations, supply chains and customer activity; lower consumer demand for goods and services; higher levels of unemployment; event cancellations and restrictions; service cancellations, reductions and other changes; significant challenges in healthcare service preparation and delivery; prolonged quarantines; and general concern and uncertainty. These impacts have negatively affected, and may continue to negatively affect, the global economy, the economies of individual countries, and the financial performance of individual issuers, sectors, industries, asset classes, and markets in significant and unforeseen ways. The COVID-19 pandemic also has resulted in significant market volatility, exchange trading suspensions and closures, declines in global financial markets, higher default rates, and economic downturns and recessions, and may continue to have similar effects in the future. In addition, actions taken by government and quasi-governmental authorities and regulators throughout the world in response to the COVID-19 pandemic, including significant fiscal and monetary policies changes, may affect the value, volatility, and liquidity of some securities and other assets. Health crises caused by the COVID-19 pandemic may also exacerbate other pre-existing political, social, economic, market and financial risks. The effects of the outbreak in developing or emerging market countries may be greater due to less established health care systems. The foregoing could impair the fund's ability to maintain operational standards (such as with respect to satisfying redemption requests), disrupt the operations of the fund's service providers, adversely affect the value and liquidity of the fund's investments, and negatively impact the fund's performance and your investment in the fund. Given the significant uncertainty surrounding the magnitude, duration, reach, costs

and effects of the COVID-19 pandemic, as well as actions that have been or could be taken by governmental authorities or other third parties, it is difficult to predict its potential impacts on a fund's investments.

Securities and financial markets may be susceptible to market manipulation or other fraudulent trade practices, which could disrupt the orderly functioning of these markets, contribute to overall market volatility and adversely affect the values of the fund's investments.

Given the increasing interdependence among global economies and markets, conditions in one country, region or market might adversely affect financial conditions or issuers in other countries, regions or markets. For example, any partial or complete dissolution of the Economic and Monetary Union of the European Union, or any increased uncertainty as to its status, could have significant adverse effects on global currency and financial markets, and on the values of the fund's investments. On January 31, 2020, the United Kingdom formally withdrew from the European Union (commonly known as "Brexit"). An agreement between the United Kingdom and the European Union governing their future trade relationship became effective January 1, 2021. While the full impact of Brexit is unknown, Brexit has already resulted in volatility in European and global markets. Potential negative long-term effects could include, among others, greater market volatility and illiquidity, disruptions to world securities markets, currency fluctuations, deterioration in economic activity, a decrease in business confidence, and an increased likelihood of a recession in the United Kingdom. To the extent the fund has focused its investments in a particular country, region or market, adverse geopolitical and other events impacting that country, region or market could have a disproportionate impact on the fund.

Master Limited Partnerships (MLPs)

An MLP generally is a publicly traded company organized as a limited partnership or limited liability company and treated as a partnership for U.S. federal income tax purposes. MLPs may derive income and gains from, among other things, the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resources. MLPs generally have two classes of owners, the general partner and limited partners. The general partner of an MLP is typically owned by one or more of the following: a major energy company, an investment fund, or the direct management of the MLP. The general partner may be structured as a private or publicly traded corporation or other entity. The general partner typically controls the operations and management of the MLP through an up to 2% equity interest in the MLP plus, in many cases, ownership of common units and subordinated units. Limited partners own the remainder of the partnership through ownership of common units and have a limited role in the partnership's operations and management.

MLP securities in which certain funds may invest can include, but are not limited to: (i) equity securities of MLPs, including common units, preferred units or convertible subordinated units; (ii) debt securities of MLPs, including debt securities rated below investment grade; (iii) securities of MLP affiliates; (iv) securities of open-end funds, closed-end funds or exchange-traded funds ("ETFs") that invest primarily in MLP securities; or (v) exchange-traded notes whose returns are linked to the returns of MLPs or MLP indices.

The risks of investing in an MLP are generally those inherent in investing in a partnership as opposed to a corporation. For example, MLP common units represent an equity ownership interest in a partnership, providing limited voting rights and entitling the holder to a share of the company's success through distributions and/or capital appreciation. Unlike shareholders of a corporation, common unit holders do not elect directors annually and generally have the right to vote only on certain significant events, such as mergers, a sale of substantially all of the assets, removal of the general partner or material amendments to the partnership agreement. In addition, state law governing partnerships is often less restrictive than state law governing corporations. Accordingly, there may be fewer protections afforded investors in an MLP than investors in a corporation.

MLP common units and other equity securities can be affected by macro-economic and other factors affecting the stock market in general, expectations of interest rates, investor sentiment towards MLPs, changes in a particular issuer's financial condition, or unfavorable or unanticipated poor performance of a particular issuer (in the case of MLPs, generally measured in terms of distributable cash flow). Prices of common units of individual MLPs and other equity securities can also be affected by fundamentals unique to the partnership or company, including earnings power and coverage ratios.

Additional risks involved with investing in an MLP are risks associated with the specific industry or industries in which the partnership invests. For example, companies operating in the energy MLP sector are subject to risks that are specific to the industry in which they operate. MLPs and other companies that provide crude oil, refined product and natural gas services are subject to supply and demand fluctuations in the markets they serve which may be impacted by a wide range of factors including

fluctuating commodity prices, weather, increased conservation or use of alternative fuel sources, increased governmental or environmental regulation, depletion, rising interest rates, declines in domestic or foreign production, accidents or catastrophic events, and economic conditions, among others. Energy MLP companies are subject to varying demand for oil, natural gas or refined products in the markets they serve, as well as changes in the supply of products requiring gathering, transport, processing, or storage due to natural declines in reserves and production in the supply areas serviced by the companies' facilities. Declines in oil or natural gas prices, as well as adverse regulatory decisions, may cause producers to curtail production or reduce capital spending for production or exploration activities, which may in turn reduce the need for the services provided by energy MLP companies. Lower prices may also create lower processing margins. Energy MLPs may also be subject to regulation by the Federal Energy Regulatory Commission ("FERC") with respect to tariff rates that these companies may charge for interstate pipeline transportation services. An adverse determination by FERC with respect to tariff rates of a pipeline MLP could have a material adverse effect on the business, financial conditions, result of operations, cash flows and prospects of that pipeline MLP and its ability to make cash distributions to its equity owners.

Money Market Instruments

Money market instruments, or short-term debt instruments, consist of obligations such as commercial paper, bank obligations (*e.g.*, certificates of deposit and bankers' acceptances), repurchase agreements, and various government obligations, such as Treasury bills. These instruments have a remaining maturity of one year or less and are generally of high credit quality. Money market instruments may be structured to be, or may employ a trust or other form so that they are, eligible investments for money market funds. For example, put features can be used to modify the maturity of a security or interest rate adjustment features can be used to enhance price stability. If a structure fails to function as intended, adverse tax or investment consequences may result. Neither the IRS nor any other regulatory authority has ruled definitively on certain legal issues presented by certain structured securities. Future tax or other regulatory determinations could adversely affect the value, liquidity, or tax treatment of the income received from these securities or the nature and timing of distributions made by the funds.

Commercial paper is a money market instrument issued by banks or companies to raise money for short-term purposes. Commercial paper is usually sold on a discounted basis rather than as an interest-bearing instrument. Unlike some other debt obligations, commercial paper is typically unsecured, which increases the credit risk associated with this type of investment. In some cases, commercial paper may be backed by some form of credit enhancement, typically in the form of a guarantee by a commercial bank. Commercial paper backed by guarantees of foreign banks may involve additional risk due to the difficulty of obtaining and enforcing judgments against such banks and the generally less restrictive regulations to which such banks are subject. Commercial paper also may be issued as an asset-backed security (that is, backed by a pool of assets representing the obligations of a number of different issuers), in which case certain of the risks discussed in "Mortgage-backed and Asset-backed securities" would apply. Commercial paper is traded primarily among institutions.

Certificates of deposit are receipts issued by a depository institution in exchange for the deposit of funds. The issuer agrees to pay the amount deposited plus interest to the bearer of the receipt on the date specified on the certificate. The certificate usually can be traded in the secondary market prior to maturity. Certificates of deposit may include those issued by foreign banks outside the United States. Such certificates of deposit include Eurodollar and Yankee certificates of deposit. Eurodollar certificates of deposit are U.S. dollar-denominated certificates of deposit issued by branches of foreign and domestic banks located outside the United States. Yankee certificates of deposit are certificates of deposit issued by a U.S. branch of a foreign bank denominated in U.S. dollars and held in the United States.

Bankers' acceptances typically arise from short-term credit arrangements designed to enable businesses to obtain funds to finance commercial transactions. Generally, an acceptance is a time draft drawn on a bank by an exporter or an importer to obtain a stated amount of funds to pay for specific merchandise. The draft is then "accepted" by a bank that, in effect, unconditionally guarantees to pay the face value of the instrument on its maturity date. The acceptance may then be held by the accepting bank as an earning asset or it may be sold in the secondary market at the going rate of discount for a specific maturity. Although maturities for acceptances can be as long as 270 days, most acceptances have maturities of six months or less. Putnam Money Market Fund may invest in bankers' acceptances issued by banks with deposits in excess of $2 billion (or the foreign currency equivalent) at the close of the last calendar year. If the Trustees change this minimum deposit requirement, shareholders would be notified. Other Putnam Funds may invest in bankers' acceptances without regard to this requirement.

Time deposits are interest-bearing non-negotiable deposits at a bank or a savings and loan association that have a specific maturity date. A time deposit earns a specific rate of interest over a definite period of time. Time deposits cannot be traded on the secondary market and those exceeding seven days and with a withdrawal penalty are considered to be illiquid.

In accordance with rules issued by the SEC, the fund may from time to time invest all or a portion of its assets, including any cash balances in money market and/or short-term bond funds advised by the Investment Manager or its affiliates. In connection with such investments, the Investment Manager may waive a portion of the advisory fees otherwise payable by the fund. See "Charges and expenses" in Part I of this SAI for the amount, if any, waived by the Investment Manager in connection with such investments.

Mortgage-backed and Asset-backed Securities

Mortgage-backed securities, including collateralized mortgage obligations ("CMOs"), stripped mortgage-backed securities and securities that reflect an interest in reverse mortgages, represent a participation in, or are secured by, mortgage loans or otherwise are secured by real estate related collateral. Mortgage-backed securities may be issued by agencies or instrumentalities of the U.S. government (and may not be guaranteed or insured by the U.S. government, such as those issued by Freddie Mac, Fannie Mae, and FHLBs), foreign governments (or their agencies or instrumentalities), or non-governmental issuers. Interest and principal payments (including prepayments) on the mortgage loans underlying mortgage-backed securities typically pass through to the holders of the mortgage-backed securities or serve as the source for payments on the mortgage-backed securities. Asset-backed securities are structured like mortgage-backed securities, but instead of mortgage loans or interests in mortgage loans, the underlying assets may include such items as motor vehicle installment sales or installment loan contracts, home equity loans, leases of various types of real, personal and other property and receivables from credit card agreements. Similar to mortgage-backed securities, other types of asset-backed securities may be issued by agencies or instrumentalities of the U.S. government (and may or may not be guaranteed or insured by the U.S. government), foreign governments (or their agencies or instrumentalities), or non-governmental issuers.

Mortgage-backed securities may have yield and maturity characteristics corresponding to the underlying assets. Unlike traditional debt securities, which may pay a fixed rate of interest until maturity, when the entire principal amount comes due, payments on certain mortgage-backed securities include both interest and a partial repayment of principal. Besides the scheduled repayment of principal, repayments of principal may result from the voluntary prepayment or refinancing of the underlying mortgage loans or the foreclosure of collateral securing the underlying mortgage loans. If property owners make unscheduled prepayments on their mortgage loans, these prepayments will result in early payment of the applicable mortgage-backed securities. In that event the fund may be unable to invest the proceeds from the early payment of the mortgage-backed securities in an investment that provides as high a yield as those mortgage-backed securities. Consequently, early payment associated with mortgage-backed securities may cause these securities to experience significantly greater price and yield volatility than that experienced by traditional fixed-income securities. The occurrence of mortgage prepayments is affected by factors including the level of interest rates, general economic conditions, the location and age of the mortgage and other social and demographic conditions. During periods of falling interest rates, the rate of mortgage prepayments tends to increase, thereby tending to decrease the life of mortgage-backed securities. During periods of rising interest rates, the rate of mortgage prepayments usually decreases, thereby tending to increase the life of mortgage-backed securities. If the life of a mortgage-backed security is inaccurately predicted, the fund may not be able to realize the rate of return it expected.

The fund may invest in mortgage-backed securities that represent pools of mortgage loans with variable rates of interest (such loans, "ARMs"). Adjustable-rate mortgage-backed securities, like traditional mortgage-backed securities, are interests in pools of mortgage loans that provide investors with payments consisting of both principal and interest as mortgage loans in the underlying mortgage pool are paid off by the borrowers. Unlike fixed-rate mortgage-backed securities, adjustable-rate mortgage-backed securities are collateralized by or represent interests in ARMs. Interest rates for ARMs are reset at periodic intervals, usually by reference to an interest rate index or market interest rate. Although the rate adjustment feature may act as a buffer to reduce sharp changes in the value of ARMs these securities are still subject to changes in value based on, among other things, changes in market interest rates or changes in the issuer's creditworthiness. If rates increase due to a reset, the risk of default by underlying borrowers may increase. Because the interest rates are reset only periodically, changes in the interest rate on ARMs may lag changes in prevailing market interest rates. The market value of an adjustable-rate mortgage-backed security may be adversely affected if interest rates increase faster than the rates of interest payable on the ARMs underlying the security. Also, some ARMs are subject to caps or floors that limit the maximum change in the interest rate during a specified period or over the life of the ARM. As a result, changes in the interest rate on an ARM may not fully reflect changes in prevailing market interest rates during certain periods.

The fund may also invest in mortgage-backed securities that represent pools of "hybrid" ARMs, underlying mortgages that combine fixed-rate and adjustable rate features. A hybrid ARM is a type of mortgage in which the interest rate is fixed for a specified period and then resets periodically, or floats, for the remaining mortgage term. During the initial interest period, hybrid

ARMs behave more like fixed-rate mortgage loans. All hybrid ARMs have a reset date, the date on which a hybrid ARM changes from a fixed interest rate to a floating interest rate. At the reset date, a hybrid ARM can adjust by a maximum specified amount based on a margin over an identified index. Like ARMs, hybrid ARMs have periodic and lifetime limitations on the increases that can be made to the interest rates that mortgagors pay. Therefore, if during a floating rate period interest rates rise above the interest rate limits of the hybrid ARM, a fund holding a security backed by that hybrid ARM does not benefit from further increases in interest rates.

Mortgage-backed and asset-backed securities are less effective than other types of securities as a means of "locking in" attractive long-term interest rates. One reason is the need to reinvest prepayments of principal; another is the possibility of significant unscheduled prepayments resulting from declines in interest rates. These prepayments would have to be reinvested at lower rates. The automatic interest rate adjustment feature of mortgages underlying ARMs likewise reduces the ability to lock-in attractive rates. As a result, mortgage-backed and asset-backed securities may have less potential for capital appreciation during periods of declining interest rates than other securities of comparable maturities, although they may have a similar risk of decline in market value during periods of rising interest rates. Prepayments may also significantly shorten the effective maturities of these securities, especially during periods of declining interest rates. Conversely, during periods of rising interest rates, a reduction in prepayments may increase the effective maturities of these securities, subjecting them to a greater risk of decline in market value in response to rising interest rates than traditional debt securities, and, therefore, potentially increasing the volatility of the fund.

At times, some mortgage-backed and asset-backed securities will have higher than market interest rates and therefore will be purchased at a premium above their par value. Prepayments may cause greater losses on securities purchased at a premium than securities that are not purchased at a premium.

Mortgage-backed and asset-backed securities are subject to varying degrees of credit risk, depending on whether they are issued, or are guaranteed or insured, by agencies or instrumentalities of the U.S. government or by non-governmental issuers. Securities issued by private organizations may not be readily marketable, and since the deterioration of worldwide economic and liquidity conditions that became acute in 2008, mortgage-backed and asset-backed securities have been subject to greater liquidity risk. These conditions may occur again. Also, government actions and proposals affecting the terms of underlying home loans, changes in demand for products (e.g., automobiles) financed by those loans, and the inability of borrowers to refinance existing loans (e.g., sub-prime mortgages), have had, and may continue to have, adverse valuation and liquidity effects on mortgage-backed and asset-backed securities., There can be no assurance that in the future the market for mortgage-backed and asset-backed securities will continue to improve and become more liquid.

Mortgage-related securities include, among other things, securities that reflect an interest in a pool of reverse mortgages. In a reverse mortgage, a lender makes a loan to a homeowner based on the homeowner's equity in his or her home. A homeowner must be age 62 or older to qualify for a reverse mortgage but is not necessarily required to have any minimum income. Generally, the homeowner is not required to pay interest or repay principal on the loan until the homeowner dies, sells the home, or ceases to use the home as his or her primary residence. There are three general types of reverse mortgages: (1) single-purpose reverse mortgages, which are offered by certain state and local government agencies and nonprofit organizations; (2) federally-insured reverse mortgages (known as home equity conversion mortgages), which are backed by the U. S. Department of Housing and Urban Development; and (3) proprietary reverse mortgages, which are privately offered loans. A mortgage-related security may be backed by a single type of reverse mortgage or by a combination of types of reverse mortgages. Reverse mortgage-related securities include agency and privately issued mortgage-related securities. The principal government guarantor of reverse mortgage-related securities is Ginnie Mae.

Reverse mortgage-related securities may be subject to risks different than other types of mortgage-related securities due to the unique nature of the underlying loans. The date of repayment for these loans is uncertain and may occur sooner or later than anticipated. The timing of payments for the corresponding mortgage-related security may also be uncertain. Because reverse mortgages are offered only to persons 62 and older and there may be no income restrictions, the loans may react differently than traditional home loans to market events. As a result, investors (which may include the fund) in notes issued by reverse mortgage trusts ("RMTs") may be deprived of payments to which they are entitled. This could result in losses to the fund. Investors, including the fund, may determine to pursue negotiations or legal claims or otherwise seek compensation from RMT service providers in certain instances. This may involve the fund incurring costs and expenses associated with such actions.

CMOs may be issued by a U.S. government agency or instrumentality or by a private issuer. Although payment of the principal of, and interest on, the underlying collateral securing privately issued CMOs may be guaranteed by the U.S. government or its

agencies or instrumentalities (such as Freddie Mac, Fannie Mae, or Ginnie Mae), these CMOs represent obligations solely of the private issuer and are not insured or guaranteed by the U.S. government, its agencies or instrumentalities or any other person or entity. CMOs may also be less liquid and may exhibit greater price volatility than other types of mortgage- or other asset-backed securities.

CMOs are designed to reduce the risk of prepayment for investors by issuing multiple classes of securities (or "tranches"), each having different maturities, interest rates and payment schedules, and with the principal and interest on the underlying mortgages allocated among the several classes in various ways. Payment of interest or principal on some classes or series of CMOs may be subject to contingencies or some classes or series may bear some or all of the risk of default on the underlying mortgages. CMOs of different classes or series are generally retired in sequence as the underlying mortgage loans in the mortgage pool are repaid. If enough mortgages are repaid ahead of schedule, the classes or series of a CMO with the earliest maturities generally will be retired prior to their maturities. Thus, the early retirement of particular classes or series of a CMO would have the same effect as the prepayment of mortgages underlying other mortgage-backed securities. Conversely, slower than anticipated prepayments can extend the effective maturities of CMOs, subjecting them to a greater risk of decline in market value in response to rising interest rates than traditional debt securities, and, therefore, potentially increasing their volatility.

Prepayments could result in losses on stripped mortgage-backed securities. Stripped mortgage-backed securities are usually structured with two classes that receive different portions of the interest and principal distributions on a pool of mortgage loans. A common type of stripped mortgage-backed security will have one class receiving all of the interest from the mortgage assets (interest only or "IOs"), while the other class will receive all of the principal (principal only or "POs"). The yield to maturity on an IO class of stripped mortgage-backed securities is extremely sensitive not only to changes in prevailing interest rates but also to the rate of principal payments (including prepayments) on the underlying assets. A rapid rate of principal prepayments may have a measurable adverse effect on the stripped mortgage-backed security's yield to maturity to the extent it invests in IOs. If the assets underlying the IO experience greater than anticipated prepayments of principal, the fund may fail to recoup fully its initial investment in these securities. Conversely, POs tend to increase in value if prepayments are greater than anticipated and decline if prepayments are slower than anticipated. Generally, the market value of POs is unusually volatile in response to changes in interest rates. The secondary market for stripped mortgage-backed securities may be more volatile and less liquid than that for other mortgage-backed securities, potentially limiting the fund's ability to buy or sell those securities at any particular time.

The risks associated with other asset-backed securities (including in particular the risks of issuer default and of early prepayment) are generally similar to those described above for CMOs. In addition, because asset-backed securities generally do not have the benefit of a security interest in the underlying assets that is comparable to a mortgage, asset-backed securities present certain additional risks that are not present with mortgage-backed securities. The ability of an issuer of asset-backed securities to enforce its security interest in the underlying assets may be limited. For example, revolving credit receivables are generally unsecured and the debtors on such receivables are entitled to the protection of a number of state and federal consumer credit laws, many of which give debtors the right to set-off certain amounts owed, thereby reducing the balance due. Automobile receivables generally are secured, but by automobiles, rather than by real property.

The value of asset-backed securities may be substantially dependent on the servicing of the underlying assets, and asset-backed securities are therefore subject to risks associated with negligence by, or defalcation of, the servicers of those assets. These risks may be heightened in the case of an asset-backed security collateralized by the fees earned by the servicer, as the servicer may have a reduced financial incentive to provide appropriate servicing. In certain circumstances, the mishandling of related documentation may also affect the rights of the security holders in and to the underlying collateral. The insolvency of entities that generate receivables or that utilize the assets may result in added costs and delays in addition to losses associated with a decline in the value of the underlying assets.

Payment of interest on asset-backed securities and repayment of principal largely depends on the cash flows generated by the underlying assets backing the securities and, in certain cases, may be supported by letters of credit, surety bonds, or other credit enhancements. The amount of market risk associated with asset-backed securities depends on many factors, including the deal structure (i.e., determination as to the amount of underlying assets or other support needed to produce the cash flows necessary to service interest and make principal payments), the quality of the underlying assets, the level of credit support, if any, provided for the securities, and the credit quality of the credit-support provider, if any. In recent years, a significant number of asset-backed security insurers have defaulted on their obligations.

Consistent with the fund's investment objective and policies, the fund may invest in other types of mortgage- and asset-backed securities offered currently or in the future, including certain yet-to-be-developed types of mortgage- and asset-backed securities which may be created as the market evolves.

Additional Information Related to Freddie Mac and Fannie Mae. The extreme and unprecedented volatility and disruption that impacted the capital and credit markets beginning in 2008 led to market concerns regarding the ability of Freddie Mac and Fannie Mae to withstand future credit losses associated with securities held in their investment portfolios, and on which they provide guarantees, without the direct support of the federal government. On September 7, 2008, Freddie Mac and Fannie Mae were placed under the conservatorship of the Federal Housing Finance Agency (FHFA). Under the plan of conservatorship, the FHFA assumed control of, and generally has the power to direct, the operations of Freddie Mac and Fannie Mae, and is empowered to exercise all powers collectively held by their respective shareholders, directors and officers, including the power to: (1) take over the assets of and operate Freddie Mac and Fannie Mae with all the powers of the shareholders, the directors and the officers of Freddie Mac and Fannie Mae and conduct all business of Freddie Mac and Fannie Mae; (2) collect all obligations and money due to Freddie Mac and Fannie Mae; (3) perform all functions of Freddie Mac and Fannie Mae which are consistent with the conservator's appointment; (4) preserve and conserve the assets and property of Freddie Mac and Fannie Mae; and (5) contract for assistance in fulfilling any function, activity, action or duty of the conservator.

In connection with the actions taken by the FHFA, the Treasury has entered into certain preferred stock purchase agreements (SPAs) with each of Freddie Mac and Fannie Mae which establish the Treasury as the holder of a new class of senior preferred stock in each of Freddie Mac and Fannie Mae. The senior preferred stock was issued in connection with financial contributions from the Treasury to Freddie Mac and Fannie Mae. Although the SPAs are subject to amendment from time to time, currently the Treasury is obligated to provide such financial contributions up to an aggregate maximum amount determined by a formula set forth in the SPAs, and until such aggregate maximum amount is reached, there is not a specific end date to the Treasury's obligations.

The future status and role of Freddie Mac and Fannie Mae could be impacted by (among other things) the actions taken and restrictions placed on Freddie Mac and Fannie Mae by the FHFA in its role as conservator, the restrictions placed on Freddie Mac's and Fannie Mae's operations and activities under the SPAs, market responses to developments at Freddie Mac and Fannie Mae, downgrades or upgrades in the credit ratings assigned to Freddie Mac and Fannie Mae by nationally recognized statistical rating organizations (NRSROs) or ratings services, and future legislative and regulatory action that alters the operations, ownership, structure and/or mission of these institutions, each of which may, in turn, impact the value of, and cash flows on, any securities guaranteed by Freddie Mac and Fannie Mae.

In addition, the future of Freddie Mac and Fannie Mae, and other U.S. government-sponsored enterprises that are not backed by the full faith and credit of the U.S. government (GSEs), remains in question as the U.S. government continues to consider options ranging from structural reform, nationalization, privatization, or consolidation, to outright elimination. The issues that have led to significant U.S. government support for Freddie Mac and Fannie Mae have sparked serious debate regarding the continued role of the U.S. government in providing mortgage loan liquidity.

Options on Securities

Writing covered options. The fund may write (*i.e.*, sell) covered call options and covered put options on optionable securities held in its portfolio or that it has an absolute and immediate right to acquire without additional cash consideration (or, if additional cash consideration is required, cash or other assets determined to be liquid by the Investment Manager in accordance with procedures established by the Trustees, in such amount as are set aside on the fund's books), when in the opinion of the Investment Manager such transactions are consistent with the fund's goal(s) and policies. Call options written by the fund give the purchaser the right to buy the underlying securities from the fund at a stated exercise price, regardless of the security's market price; put options written by the fund give the purchaser the right to sell the underlying securities to the fund at a stated exercise price, regardless of the security's market price.

The fund will receive a premium from writing a put or call option, which increases the fund's return on the underlying security in the event the option expires unexercised or is closed out at a profit. The amount of the premium reflects, among other things, the relationship between the exercise price and the current market value of the underlying security, the volatility of the underlying security, the amount of time remaining until expiration, current interest rates, and the effect of supply and demand in the options market and in the market for the underlying security. By writing a call option, if the fund holds the security, the fund limits its opportunity to profit from any increase in the market value of the underlying security above the exercise price of the option but

continues to bear the risk of a decline in the value of the underlying security. If the fund does not hold the underlying security, the fund bears the risk that, if the market price exceeds the option strike price, the fund will suffer a loss equal to the difference at the time of exercise. By writing a put option, the fund assumes the risk that it may be required to purchase the underlying security for an exercise price higher than its then-current market value, resulting in a potential capital loss unless the security subsequently appreciates in value.

The fund may terminate an option that it has written prior to its expiration by entering into a closing purchase transaction, in which it purchases an offsetting option. A closing purchase transaction will ordinarily be effected in order to realize a profit on an outstanding option, to prevent an underlying instrument from being called, to permit the sale of the underlying instrument or to permit the writing of a new option containing different terms on such underlying instrument. The fund realizes a profit or loss from a closing transaction if the cost of the transaction (option premium plus transaction costs) is less or more than the premium received from writing the option. Because increases in the market price of a call option generally reflect increases in the market price of the security underlying the option, any loss resulting from a closing purchase transaction may be offset in whole or in part by unrealized appreciation of the underlying security.

If the fund writes a call option but does not own the underlying security, and when it writes a put option, the fund may be required to deposit cash or securities with its broker as "margin," or collateral, for its obligation to buy or sell the underlying security. As the value of the underlying security varies, the fund may have to deposit additional margin with the broker. Margin requirements are complex and are fixed by individual brokers, subject to minimum requirements currently imposed by the Federal Reserve Board and by stock exchanges and other self-regulatory organizations.

Purchasing put options. The fund may purchase put options to protect its portfolio holdings in an underlying security against a decline in market value. Such protection is provided during the life of the put option since the fund, as holder of the option, is able to sell the underlying security at the put exercise price regardless of any decline in the underlying security's market price. If such a price decline occurs, the put option will permit the fund to sell the security at the higher exercise price or to close out the option at a profit. In order for a put option to be profitable, the market price of the underlying security must decline sufficiently below the exercise price to cover the premium and transaction costs. By using put options in this manner, the fund will reduce any profit it might otherwise have realized from appreciation of the underlying security by the premium paid for the put option and by transaction costs. The fund may also purchase put options for other investment purposes, including to take a short position in the security underlying the put option.

Purchasing call options. The fund may purchase call options to hedge against an increase in the price of securities that the fund wants ultimately to buy. Such protection is provided during the life of the call option since the fund, as holder of the call option, is able to buy the underlying security at the exercise price regardless of any increase in the underlying security's market price. If such a price increase occurs, a call option will permit the fund to purchase the securities at the exercise price or to close out the option at a profit. In order for a call option to be profitable, the market price of the underlying security must rise sufficiently above the exercise price to cover the premium and transaction costs. The fund may also purchase call options for other investment purposes.

Risk factors in options transactions. The successful use of the fund's options strategies depends on the ability of the Investment Manager to forecast correctly interest rate and market movements. For example, if the fund were to write a call option based on the Investment Manager's expectation that the price of the underlying security would fall, but the price were to rise instead, the fund could be required to sell the security upon exercise at a price below the current market price. Similarly, if the fund were to write a put option based on the Investment Manager's expectation that the price of the underlying security would rise, but the price were to fall instead, the fund could be required to purchase the security upon exercise at a price higher than the current market price.

When the fund purchases an option, it runs the risk that it will lose its entire investment in the option in a relatively short period of time, unless the fund exercises the option or enters into a closing sale transaction before the option's expiration. If the price of the underlying security does not rise (in the case of a call) or fall (in the case of a put) to an extent sufficient to cover the option premium and transaction costs, the fund will lose part or all of its investment in the option. This contrasts with an investment by the fund in the underlying security, since the fund will not realize a loss if the security's price does not change.

The effective use of options also depends on the fund's ability to terminate option positions at times when the Investment Manager deems it desirable to do so. There is no assurance that the fund will be able to effect closing transactions at any particular time or at an acceptable price. If a secondary market in options were to become unavailable, the fund could no longer

engage in closing transactions. Lack of investor interest might adversely affect the liquidity of the market for particular options or series of options. A market may discontinue trading of a particular option or options generally. In addition, a market could become temporarily unavailable if unusual events -- such as volume in excess of trading or clearing capability -- were to interrupt its normal operations. Although the fund may be able to offset to some extent any adverse effects of being unable to terminate an option position, the fund may experience losses in some cases as a result of such inability.

A market may at times find it necessary to impose restrictions on particular types of exchange-traded options transactions, such as opening transactions. For example, if an underlying security ceases to meet qualifications imposed by the market or the Options Clearing Corporation, new series of options on that security will no longer be opened to replace expiring series, and opening transactions in existing series may be prohibited. If an options market were to become unavailable, the fund as a holder of an option would be able to realize profits or limit losses only by exercising the option, and the fund, as option writer, would remain obligated under the option until expiration or exercise.

Disruptions in the markets for the securities underlying options purchased or sold by the fund could result in losses on the options. For example, if a fund is unable to purchase a security underlying a put option it had purchased, the fund may be unable to exercise the put option. If trading is interrupted in an underlying security, the trading of options on that security is normally halted as well. As a result, the fund as purchaser or writer of an option will be unable to close out its positions until options trading resumes, and it may be faced with considerable losses if trading in the security reopens at a substantially different price. In addition, the Options Clearing Corporation or other options markets may impose exercise restrictions in respect of exchange-traded options. If a prohibition on exercise is imposed at the time when trading in the option has also been halted, the fund as purchaser or writer of an option will be locked into its position until one of the two restrictions has been lifted. If the Options Clearing Corporation were to determine that the available supply of an underlying security appears insufficient to permit delivery by the writers of all outstanding calls in the event of exercise, it may prohibit indefinitely the exercise of put options. The fund, as holder of such a put option, could lose its entire investment if it is unable to exercise the put option prior to its expiration.

The fund may use both European-style options, which are only exercisable at a specific expiration time on the expiration date, and American-style options, which are exercisable at any time prior to the expiration date. Since an American-style option allows the holder to exercise its rights any time before the option's expiration, the writer of an American-style option has no control over when it will be required to fulfill its obligations as a writer of the option. (The writer of a European-style option is not subject to this risk because the holder may only exercise the option on its expiration date.)

Options can be traded either through established exchanges ("exchange traded options") or privately negotiated transactions (over-the-counter or "OTC" options). Exchange traded options are standardized with respect to, among other things, the underlying interest, expiration date, contract size and strike price. The terms of OTC options are generally negotiated by the parties to the option contract which allows the parties greater flexibility in customizing the agreement, but OTC options are generally less liquid than exchange traded options. OTC options purchased by the fund and assets held to cover OTC options written by the fund may, under certain circumstances, be considered illiquid securities for purposes of any limitation on the fund's ability to invest in illiquid securities. All option contracts involve credit risk if the counterparty to the option contract (*e.g.*, the clearing house or OTC counterparty) or the third party effecting the transaction in the case of cleared options (*e.g.*, futures commission merchant or broker/dealer) fails to perform. The credit risk in OTC options that are not cleared is dependent on the credit worthiness of the individual counterparty to the contract and may be greater than the credit risk associated with cleared options.

Foreign-traded options are subject to many of the same risks presented by internationally-traded securities. In addition, because of time differences between the United States and other countries, and because different holidays are observed in different countries, foreign options markets may be open for trading during hours or on days when U.S. markets are closed. As a result, option premiums may not reflect the current prices of the underlying interest in the United States.

There are significant differences between the securities and options markets that could result in an imperfect correlation between these markets, causing a given transaction not to achieve its objectives. In addition, many options, in particular OTC options, are complex and often valued based on subjective factors. Improper valuations can result in increased cash payment requirements to counterparties or a loss of value to the fund.

The market price of an option is affected by many factors, including changes in the market prices or dividend rates of underlying securities (or in the case of indices, the securities in such indices); the time remaining before expiration; changes in interest rates

or exchange rates; and changes in the actual or perceived volatility of the relevant stock market and underlying securities. The market price of an option also may be adversely affected if the market for the option becomes less liquid.

In addition to options on securities and futures, the fund may also enter into options on futures, swaps, or other instruments as described elsewhere in this SAI.

Preferred Stocks and Convertible Securities

The fund may invest in preferred stocks or convertible securities. A preferred stock is a class of stock that generally pays dividends at a specified rate and has preference over common stock in the payment of dividends and the liquidation of an issuer's assets but is junior to the debt securities of the issuer in those same respects. Under ordinary circumstances, preferred stock does not carry voting rights. As with all equity securities, the value of preferred stock fluctuates based on changes in a company's financial condition and on overall market and economic conditions. The value of preferred stocks is particularly sensitive to changes in interest rates and is more sensitive to changes in an issuer's creditworthiness than is the value of debt securities. In addition, many preferred stocks may be called or redeemed prior to their maturity by the issuer under certain conditions, which can limit the benefit to investors of a decline in interest rates. Shareholders of preferred stock may suffer a loss of value if dividends are not paid. Additionally, if the issuer of preferred stock experiences economic or financial difficulties, its preferred stock may lose value due to the reduced likelihood that its board of directors will declare a dividend. Certain preferred stocks contain provisions that allow an issuer under certain conditions to skip or defer distributions. If the fund owns a preferred stock that is deferring its distribution, it may be required to report income for tax purposes despite the fact that it is not receiving current income on this position. Preferred stocks often are subject to legal provisions that allow for redemption in the event of certain tax or legal changes or at the issuer's call. In the event of redemption, the fund may not be able to reinvest the proceeds at comparable rates of return. Preferred stocks are subordinated to bonds and other debt securities in an issuer's capital structure in terms of priority for corporate income and liquidation payments, and therefore will be subject to greater credit risk than those debt securities. Preferred stocks may trade less frequently and in a more limited volume and may be subject to more abrupt or erratic price movements than many other securities, such as common stocks, corporate debt securities, and U.S. government securities.

Convertible securities include bonds, debentures, notes, preferred stocks and other securities that may be converted into or exchanged for, at a specific price or formula within a particular period of time, a prescribed amount of common stock or other equity securities of the same or a different issuer. The conversion may occur automatically upon the occurrence of a predetermined event or at the option of either the issuer or the security holder. The holder of a convertible security is generally entitled to participate in the capital appreciation resulting from a market price increase in the issuer's common stock and to receive interest paid or accrued on debt or dividends paid or accrued until the convertible security matures or is redeemed, converted or exchanged. Before conversion, convertible securities have characteristics similar to non-convertible debt or preferred securities, as applicable. Convertible securities rank senior to common stock in an issuer's capital structure and, therefore, normally entail less risk than the issuer's common stock. However, convertible securities may also be subordinate to any senior debt obligations of the issuer, and, therefore, an issuer's convertible securities may entail more risk than such senior debt obligations. Convertible securities usually offer lower interest or dividend yields than non-convertible debt securities of similar credit quality because of the potential for capital appreciation. In addition, convertible securities are often lower-rated securities.

The market value of a convertible security is a function of its "investment value" and its "conversion value." A security's "investment value" represents the value of the security without its conversion feature (*i.e.*, a nonconvertible fixed income security). The investment value may be determined by reference to its credit quality and the current value of its yield to maturity or probable call date. At any given time, investment value may be dependent upon such factors as the general level of interest rates, the yield of similar nonconvertible securities, the financial strength of the issuer and the seniority of the security in the issuer's capital structure. A security's "conversion value" is determined by multiplying the number of shares the holder is entitled to receive upon conversion or exchange by the current market price of the underlying security. Because of the conversion feature, the market value of a convertible security will normally fluctuate in some proportion to changes in the market value of the underlying security, and, accordingly, convertible securities are subject to risks relating to the activities of the issuer and/or general market and economic conditions.

A convertible security generally will sell at a premium over its conversion value by the extent to which investors place value on the right to acquire the underlying common stock while holding a fixed income security. If the conversion value of a convertible security is significantly below its investment value, the convertible security generally trades like nonconvertible debt or preferred

stock and its market value will not be influenced greatly by fluctuations in the market price of the underlying security. Conversely, if the conversion value of a convertible security is near or above its investment value, the market value of the convertible security is typically more heavily influenced by fluctuations in the market price of the underlying security. Generally, the amount of the premium decreases as the convertible security approaches maturity. Convertible securities generally have less potential for gain than common stocks.

The fund's investments in convertible securities may at times include securities that have a mandatory conversion feature, pursuant to which the securities convert automatically into common stock or other equity securities at a specified date and a specified conversion ratio, or that are convertible at the option of the issuer. Because conversion of the security is not at the option of the holder, the fund may be required to convert the security into the underlying common stock even at times when the value of the underlying common stock or other equity security has declined substantially.

The fund's investments in preferred stocks and convertible securities, particularly securities that are convertible into securities of an issuer other than the issuer of the convertible security, may be illiquid. The fund may not be able to dispose of such securities in a timely fashion or for a fair price, which could result in losses to the fund.

Private Placements and Restricted Securities

The fund may invest in securities that are purchased in private placements and, accordingly, are subject to restrictions on resale as a matter of contract or under federal securities laws. Because there may be relatively few potential purchasers for such investments, especially under adverse market or economic conditions or in the event of adverse changes in the financial condition of the issuer, the fund could find it more difficult to sell such securities when the Investment Manager believes it advisable to do so or may be able to sell such securities only at prices lower than if such securities were more widely held. There can be no assurance that a liquid market will exist for any such security at any particular time, and a security which when purchased was liquid in the institutional markets may subsequently become illiquid.

Many private placement securities are issued by companies that are not required to file periodic financial reports, leading to challenges in evaluating the company's overall business prospects and gauging how the investment is likely to perform over time. In addition, market quotations for these securities are less readily available. Due to the more limited financial information and lack of publicly available prices, it may be more difficult to determine the fair value of these securities for purposes of computing the fund's net asset value. As a result, the judgment of the Investment Manager may at times play a greater role in valuing these securities than in the case of publicly traded securities, and the fair value prices determined for the fund could differ from those of other market participants.

While such private placements may offer attractive opportunities for investment not otherwise available on the open market, the securities so purchased are often "restricted securities," i.e., securities which cannot be sold to the public without registration under the Securities Act of 1933 (the "Securities Act") or the availability of an exemption from registration (such as Rules 144, 144A or Regulation S), or which are "not readily marketable" because they are subject to other legal or contractual delays in or restrictions on resale. In addition, the issuer typically does not have an obligation to provide liquidity to investors by buying the securities back when the investor wants to sell. Disposing of these securities may involve time-consuming negotiation and legal expenses, and it may be difficult or impossible for the fund to sell them promptly at an acceptable price. The fund may have to bear the extra expense of registering these securities for resale and the risk of substantial delay in effecting the registration. Since the offering is not registered with the SEC, investors in a private placement have less protection under the federal securities laws against improper practices than investors in registered securities.

Generally speaking, restricted securities may be sold only to qualified institutional buyers, or in a privately negotiated transaction to a limited number of purchasers, or in limited quantities after they have been held for a specified period of time and other conditions are met pursuant to an exemption from registration, or in a public offering for which a registration statement is in effect under the Securities Act. The fund may be deemed to be an "underwriter" for purposes of the Securities Act when selling restricted securities to the public, and in such event the fund may be liable to purchasers of such securities if the registration statement prepared by the issuer, or the prospectus forming a part of it, is materially inaccurate or misleading. The SEC Staff currently takes the view that any delegation by the Trustees of the authority to determine that a restricted security is readily marketable (as described in the investment restrictions of the funds) must be pursuant to written procedures established by the Trustees and the Trustees have delegated such authority to the Investment Manager.

Real Estate Investment Trusts (REITs)

The fund may invest in REITs. REITs are pooled investment vehicles that invest primarily in income-producing real estate or real estate related loans or interests. REITs may concentrate their investments in specific geographic areas or in specific property types (i.e., hotels, shopping malls, residential complexes and office buildings). Like regulated investment companies such as the fund, REITs are not taxed on income distributed to shareholders provided that they comply with certain requirements under the Code. The fund will indirectly bear its proportionate share of any expenses (such as operating expenses and advisory fees) paid by REITs in which it invests in addition to the fund's own expenses.

Investing in REITs may involve certain unique risks in addition to those risks associated with investing in the real estate industry in general (such as possible declines in the value of real estate, lack of availability of mortgage funds, or extended vacancies of property). The market value of REIT shares and the ability of the REITs to distribute income may be adversely affected by several factors, including rising interest rates, changes in the national, state and local economic climate and real estate conditions, perceptions of prospective tenants of the safety, convenience and attractiveness of the properties, the ability of the owners to provide adequate management, maintenance and insurance, the cost of complying with the Americans with Disabilities Act, increased competition from new properties, the impact of present or future environmental legislation and compliance with environmental laws, failing to maintain their exemptions from registration under the 1940 Act, changes in real estate taxes and other operating expenses, adverse changes in governmental rules and fiscal policies, adverse changes in zoning laws, and other factors beyond the control of the issuers of the REITs.

REITs are generally classified as equity REITs, mortgage REITs or a combination of equity and mortgage REITs ("hybrid REITs"). Equity REITs invest the majority of their assets directly in real property and derive income primarily from the collection of rents. Equity REITs can also realize capital gains by selling properties that have appreciated in value. Mortgage REITs invest the majority of their assets in real estate mortgages and derive income from the collection of interest payments. Equity REITs may be affected by changes in the value of the underlying property owned by the REITs, while mortgage REITs may be affected by the risk of borrower default, the likelihood of which is increased for mortgage REITs that invest in sub-prime mortgages. REITs, and mortgage REITs in particular, are also subject to interest rate risk. Rising interest rates may cause REIT investors to demand a higher annual yield, which may, in turn, cause a decline in the market price of the equity securities issued by a REIT. Rising interest rates also generally increase the costs of obtaining financing, which could cause the value of the fund's REIT investments to decline. During periods when interest rates are declining, mortgages are often refinanced. Refinancing may reduce the yield on investments in mortgage REITs. In addition, since REITs depend on payment under their mortgage loans and leases to generate cash to make distributions to their shareholders, investments in REITs may be adversely affected by defaults on such mortgage loans or leases. A hybrid REIT combines the characteristics of equity REITs and mortgage REITs, generally by holding both ownership interests and mortgage interests in real estate, and thus may be subject to risks associated with both real estate ownership and investments in mortgage-related securities.

Investing in certain REITs, which often have small market capitalizations, may also involve the same risks as investing in other small capitalization companies. REITs may have limited financial resources and their securities may trade less frequently and in limited volume and may be subject to more abrupt or erratic price movements than larger company securities. Historically, small capitalization stocks, such as REITs, have been more volatile in price than the larger capitalization stocks such as those included in the S&P 500 Index. The management of a REIT may be subject to conflicts of interest with respect to the operation of the business of the REIT and may be involved in real estate activities competitive with the REIT. REITs may own properties through joint ventures or in other circumstances in which the REIT may not have control over its investments. REITs may incur significant amounts of leverage.

REITs are dependent upon their operators' management skills, are generally not diversified (except to the extent the Code requires), and are subject to heavy cash flow dependency, borrower default or self-liquidation. REITs are also subject to the possibility of failing to qualify for the tax-advantaged treatment available to REITs under the Code or failing to maintain their exemptions from registration under the 1940 Act. In addition, REITs may be adversely affected by changes in federal tax law, for example, by limiting their permissible businesses or investments. REITs may have limited financial resources, may trade less frequently and in a limited volume, and may be subject to more abrupt or erratic price movements than more widely held securities.

The fund's investment in a REIT may result in the fund making distributions that constitute a return of capital to fund shareholders for federal income tax purposes or may require the fund to accrue and distribute income not yet received. In addition, distributions by a fund from REITs will not qualify for the corporate dividends-received deduction, or, generally, for treatment as qualified dividend income.

Redeemable Securities

Certain securities held by the fund may permit the issuer at its option to "call" or redeem its securities. Issuers of redeemable securities are generally more likely to exercise a "call" option in periods when interest rates are below the rate at which the original security was issued. If an issuer were to redeem securities held by the fund during a time of declining interest rates, the fund may not be able to reinvest the proceeds in securities providing the same investment return as the securities redeemed. The fund also may fail to recover additional amounts (i.e., premiums) paid for securities with higher interest rates, resulting in an unexpected capital loss.

Repurchase Agreements

Each fund may invest in repurchase agreements. A repurchase agreement is a contract under which the fund, the buyer under the contract, acquires a security for a relatively short period (usually not more than one week) subject to the obligation of the seller (or repurchase agreement counterparty) to repurchase, and the fund to resell, the security at a fixed time and price, which represents the fund's cost plus interest (or, for repurchase agreements under which the fund acquires a security and then sells it short, the fund's cost of "borrowing" the security). A repurchase agreement with a stated maturity of longer than one week is generally considered an illiquid investment. It is the fund's present intention to enter into repurchase agreements only with banks and registered broker-dealers. The fund may enter into repurchase agreements, including with respect to securities it wishes to sell short. See "Short Sales" in this SAI. Certain of the repurchase agreements related to securities sold short may provide that, at the option of the fund, settlement may be made by delivery of cash equal to the difference between (a) the sum of (i) the market value of the securities sold short at the time the repurchase agreement is closed out and (ii) transaction costs associated with the acquisition in the market by the repurchase agreement counterparty of the securities sold short and (b) the repurchase price specified in the repurchase agreement.

The fund may be exposed to the credit risk of the repurchase agreement counterparty (or seller) in the event that the counterparty is unable or unwilling to close out the repurchase agreement in accordance with its terms or the parties disagree as to the meaning or application of those terms. In such an event, the fund may be subject to expenses, delays, and risk of loss, including: (i) possible declines in the value of the underlying security while the fund seeks to enforce its rights under the agreement; (ii) possible reduced levels of income and lack of access to income during this period; and (iii) the inability to enforce its rights and the expenses involved in attempted enforcement. If the seller defaults, the fund could realize a loss on the sale of the underlying security to the extent that the proceeds of the sale including accrued interest are less than the resale price provided in the agreement including interest. In addition, if the seller should be involved in bankruptcy or insolvency proceedings, the fund may incur delay and costs in selling the underlying security or may suffer a loss of principal and interest if the fund is treated as an unsecured creditor and required to return the underlying collateral to the seller's estate. The fund is also subject to the risk that the repurchase agreement instrument may not perform as expected.

Pursuant to no-action relief granted by the SEC, the fund may transfer uninvested cash balances into a joint account, along with cash of other Putnam Funds and certain other accounts. These balances may be invested in one or more repurchase agreements and/or short-term money market instruments.

The fund may also enter into reverse repurchase agreements. Under a reverse repurchase agreement, the fund sells portfolio assets to another party subject to an agreement by the fund to repurchase the same assets from that party at an agreed upon price and date. During the reverse repurchase agreement period, the fund continues to receive principal and interest payments on the assets and also has the opportunity to earn a return on the collateral furnished by the counterparty to secure its obligation to redeliver the assets. The fund can use the proceeds received from entering into a reverse repurchase agreement to make additional investments, which generally causes the fund's portfolio to behave as if it were leveraged.

When entering into a reverse repurchase agreement, the fund bears the risk of delay and costs involved in recovery of securities if the initial purchaser of the securities fails to return the securities upon repurchase or fails financially. These delays and costs could be greater with respect to foreign securities. Although securities repurchase transactions are generally marked to market daily, the fund also faces the risk that securities subject to a reverse repurchase transaction will decline quickly in value, and the fund will remain obligated to repurchase those securities at a higher price, potentially resulting in a loss. If the buyer in a reverse repurchase agreement files for bankruptcy or becomes insolvent, the fund may be unable to recover the securities it sold and as a result would realize a loss equal to the difference between the value of those securities and the payment it received for them. The size of this loss will depend upon the difference between what the buyer paid for the securities the fund sold to it and the value of those securities (*e.g.*, a buyer may pay $95 for a bond with a market value of $100). In the event of a buyer's bankruptcy

or insolvency, the fund's use of proceeds from the sale of its securities may be restricted while the other party or its trustee or receiver determines whether to honor the fund's right to repurchase the securities. The fund's use of reverse repurchase agreements also subjects the fund to interest costs based on the difference between the sale and repurchase price of a security involved in such a transaction. Additionally, reverse repurchase agreements entail the same risks as over-the-counter derivatives. These include the risk that the counterparty to the reverse repurchase agreement may not be able to fulfill its obligations, as discussed above, that the parties may disagree as to the meaning or application of contractual terms, or that the instrument may not perform as expected.

See "Legal and Regulatory Risks Relating to Investment Strategy" in this SAI.

Securities Loans

The fund may make secured loans of its portfolio securities, on either a short-term or long-term basis, amounting to not more than 25% of its total assets, thereby potentially realizing additional income. The risks in lending portfolio securities, as with other extensions of credit, consist of possible delay in recovery of the securities or possible loss of rights in the collateral should the borrower fail financially. If a borrower defaults, the value of the collateral may decline before the fund can dispose of it. As a matter of policy, securities loans are made to broker-dealers or other financial institutions pursuant to agreements requiring that the loans be continuously secured by collateral consisting of cash or short-term debt obligations at least equal at all times to the value of the securities on loan, "marked-to-market" daily. The borrower pays to the fund an amount equal to any dividends or interest received on securities lent. The fund retains all or a portion of the interest received on investment of the cash collateral or receives a fee from the borrower. The fund bears the risk of any loss on the investment of the collateral; any such loss may exceed, potentially by a substantial amount, any profit to the fund from its securities lending activities. Although voting rights, or rights to consent, with respect to the loaned securities may pass to the borrower, the fund retains the right to call the loans at any time on reasonable notice, and it will do so to enable the fund to exercise voting rights on any matters materially affecting the investment. The fund may also call such loans in order to sell the securities. The fund may pay fees in connection with arranging loans of its portfolio securities. See "Legal and Regulatory Risks Relating to Investment Strategy" in this SAI.

Securities of Other Investment Companies

Securities of other investment companies, including shares of open- and closed-end investment companies and unit investment trusts (which may include ETFs), represent interests in collective investment portfolios that, in turn, invest directly in underlying instruments. The fund may invest in other investment companies when it has more uninvested cash than the Investment Manager believes is advisable, when it receives cash collateral from securities lending arrangements, when there is a shortage of direct investments available, or when the Investment Manager believes that investment companies offer attractive values.

Investment companies may be structured to perform in a similar fashion to a broad-based securities index or may focus on a particular strategy or class of assets. Passive ETFs typically seek to track the performance or dividend yield of specific indexes or companies in related industries, though unlike the index, an ETF incurs administrative expenses and transaction costs in trading securities. These indexes may be broad-based, sector-based or international. Investing in investment companies involves substantially the same risks as investing directly in the underlying instruments, but also involves expenses at the investment company-level, such as portfolio management fees and operating expenses. These expenses are in addition to the fees and expenses of the fund itself, which may lead to duplication of expenses while the fund owns another investment company's shares. In addition, investing in investment companies involves the risk that they will not perform in exactly the same fashion, or in response to the same factors, as the underlying instruments or index. To the extent the fund invests in other investment companies that are professionally managed, its performance will also depend on the investment and research abilities of investment managers other than the Investment Manager.

Open-end investment companies typically offer their shares continuously at net asset value plus any applicable sales charge and stand ready to redeem shares upon shareholder request. The shares of certain other types of investment companies, such as ETFs and closed-end investment companies, typically trade on a stock exchange or over-the-counter at a premium or a discount to their net asset value. In the case of closed-end investment companies, the number of shares is typically fixed. The securities of closed-end investment companies and ETFs carry the risk that the price the fund pays or receives may be higher or lower than the investment company's net asset value. ETFs also are subject to the risk that the timing and magnitude of cash inflows and outflows from and to investors buying and redeeming shares in the ETF could create cash balances that cause the ETF's performance to deviate from the index (which remains "fully invested" at all times). Performance of an ETF and the index it is designed to track also may diverge because the composition of the index and the securities held by the ETF may occasionally

differ. ETFs and closed-end investment companies are also subject to certain additional risks, including the risks of illiquidity and of possible trading halts or interruptions due to policies of the relevant exchange, unusual market conditions or other reasons. There can be no assurance that shares of a closed-end investment company or ETF will continue to be listed on an active exchange. The shares of investment companies, particularly closed-end investment companies, may also be leveraged, which would increase the volatility of the fund's net asset value.

The extent to which the fund can invest in securities of other investment companies, including ETFs, is generally limited by federal securities laws. For more information regarding the tax treatment of ETFs, please see "Taxes" below.

Short Sales

The fund may engage in short sales of securities and/or currencies either as a hedge against potential declines in value of a portfolio security or currency or to realize appreciation when a security or currency that the fund does not own declines in value. Short sales are transactions in which the fund sells a security or currency it does not own to a third party by borrowing the security or currency in anticipation of purchasing the same security or currency at the market price on a later date to close out the short position. The fund may also engage in short sales by entering into a repurchase agreement with respect to the security it wishes to sell short. See "Repurchase Agreements" in this SAI. The fund will incur a gain if the price of the security or currency declines between the date of the short sale and the date on which the fund replaces the borrowed security or currency; and the fund will incur a loss if the price of the security or currency increases between those dates. Such a loss is theoretically unlimited since the potential increase in the market price of the security or currency sold short is not limited. Until the security is replaced, the fund must pay the lender (or repurchase agreement counterparty) any dividends or interest that accrues during the period of the loan (or repurchase agreement). To borrow (or enter into a repurchase agreement with respect to) the security, the fund also may be required to pay a premium, which would increase the cost of the security sold. The fund's successful use of short sales is subject to the Investment Manager's ability to accurately predict movements in the market price of the security or currency sold short. Short selling may involve financial leverage because the fund is exposed both to changes in the market price of the security or currency sold short and to changes in the value of securities or currencies purchased with the proceeds of the short sale, effectively leveraging its assets. Under adverse market conditions, a fund may have difficulty purchasing securities to meet its short sale delivery obligations, and may be required to close out its short position at a time when the fund would not choose to do so, and may therefore have to sell portfolio securities to raise the capital necessary to meet its short sale obligations at a time when fundamental investment considerations may not favor such sales. There is also a risk that a borrowed security will need to be returned to the lender on short notice. If a request for return of borrowed securities occurs at a time when other short sellers of the securities are receiving similar requests, a "short squeeze" can occur, and the fund may be compelled to replace borrowed securities previously sold short with purchases on the open market at the most disadvantageous time, possibly at prices significantly in excess of the proceeds received in originally selling the securities short. In addition, the fund may have difficulty purchasing securities to meet its delivery obligations in the case of less liquid securities sold short by the fund, such as certain emerging market country securities or securities of companies with smaller market capitalizations. In connection with short sale transactions, the fund may be required to pledge certain additional assets for the benefit of the securities lender (or repurchase agreement counterparty) and the fund may, while such assets remain pledged, be limited in its ability to invest those assets in accordance with the fund's investment strategies.

Short selling is a technique that may be considered speculative and involves risks beyond the initial capital necessary to secure each transaction. It should be noted that possible losses from short sales differ from those losses that could arise from a cash investment in a security or currency because losses from a short sale may be limitless, while the losses from a cash investment in a security or currency cannot exceed the total amount of the investment in the security or currency.

Certain of the repurchase agreements related to securities sold short may provide that, at the option of the fund, in lieu of delivering the securities sold short, settlement may be made by delivery of cash equal to the difference between (a) the sum of (i) the market value of the securities sold short at the time the repurchase agreement is closed out and (ii) transaction costs associated with the acquisition in the market by the repurchase agreement counterparty of the securities sold short and (b) the repurchase price specified in the repurchase agreement. Because that cash amount represents the fund's maximum loss in the event of the insolvency of the counterparty, the fund will, except where the local market practice for foreign securities to be sold short requires payment prior to delivery of such securities, treat such amount, rather than the full notional amount of the repurchase agreement, as its "investment" in securities of the counterparty for purposes of all applicable investment restrictions, including its fundamental policy with respect to diversification.

See "Legal and Regulatory Risks Relating to Investment Strategy" in this SAI.

Short-Term Trading

In seeking the fund's objective(s), the Investment Manager will buy or sell portfolio securities whenever the Investment Manager believes it appropriate to do so. From time to time the fund will buy securities intending to seek short-term trading profits. A change in the securities held by the fund is known as "portfolio turnover" and generally involves some expense to the fund. This expense may include brokerage commissions or dealer markups and other transaction costs on both the sale of securities and the reinvestment of the proceeds in other securities. If sales of portfolio securities cause the fund to realize net short-term capital gains, such gains will be taxable as ordinary income when distributed to taxable individual shareholders. As a result of the fund's investment policies, under certain market conditions the fund's portfolio turnover rate may be higher than that of other mutual funds. Portfolio turnover rate for a fiscal year is the ratio of the lesser of purchases or sales of portfolio securities to the monthly average of the value of portfolio securities -- excluding securities whose maturities at acquisition were one year or less. The fund's portfolio turnover rate is not a limiting factor when the Investment Manager considers a change in the fund's portfolio.

Special Purpose Acquisition Companies

The fund may invest in stock, rights, warrants, and other securities of special purpose acquisition companies ("SPACs") or similar special purpose entities. A SPAC is a publicly traded company that raises investment capital in the form of a blind pool via an IPO for the purpose of acquiring an existing company. The shares of a SPAC are typically issued in "units" that include one share of common stock and one right or warrant (or partial right or warrant) conveying the right to purchase additional shares or partial shares. At a specified time following the SPAC's IPO (generally 1-2 months), the rights and warrants may be separated from the common stock at the election of the holder, after which they become freely tradeable. After going public and until an acquisition is completed, a SPAC generally invests the proceeds of its IPO (less a portion retained to cover expenses), which are held in trust, in U.S. government securities, money market securities and cash. To the extent the SPAC is invested in cash or similar securities, this may impact a fund's ability to meet its investment objective. If a SPAC does not complete an acquisition within a specified period of time after going public, the SPAC is dissolved, at which point the invested funds are returned to the SPAC's shareholders (less certain permitted expenses) and any rights or warrants issued by the SPAC expire worthless.

Because SPACs and similar entities are in essence blank check companies without an operating history or ongoing business other than seeking acquisitions, the value of their securities is particularly dependent on the ability of the entity's management to identify and complete a profitable acquisition. Some SPACs may pursue acquisitions only within certain industries or regions, which may increase the volatility of their prices. In addition, the securities issued by a SPAC, which are typically traded in the over-the-counter market, may be considered illiquid and/or be subject to restrictions on resale.

Structured Investments

A structured investment is a security having a return tied to an underlying index or other security or asset class. Structured investments generally are individually negotiated agreements and may be traded over-the-counter. Structured investments are organized and operated to restructure the investment characteristics of the underlying security. This restructuring involves the deposit with or purchase by an entity, such as a corporation or trust, or specified instruments (such as commercial bank loans) and the issuance by that entity or one or more classes of securities ("structured securities") backed by, or representing interests in, the underlying instruments. The cash flow on the underlying instruments may be apportioned among the newly issued structured securities to create securities with different investment characteristics, such as varying maturities, payment priorities and interest rate provisions, and the extent of such payments made with respect to structured securities is dependent on the extent of the cash flow on the underlying instruments. Because structured securities typically involve no credit enhancement, their credit risk generally will be equivalent to that of the underlying instruments. Investments in structured securities are generally of a class of structured securities that is either subordinated or unsubordinated to the right of payment of another class. Subordinated structured securities typically have higher yields and present greater risks than unsubordinated structured securities. Structured securities are typically sold in private placement transactions, and there currently is no active trading market for structured securities. Investments in government and government-related and restructured debt instruments are subject to special risks, including the inability or unwillingness to repay principal and interest, requests to reschedule or restructure outstanding debt and requests to extend additional loan amounts.

Swap Agreements

The fund may enter into swap agreements and other types of over-the-counter transactions such as caps, floors and collars with broker-dealers or other financial institutions for hedging or investment purposes. A swap involves the exchange by the fund with

another party of their respective commitments to pay or receive cash flows, e.g., an exchange of floating rate payments for fixed-rate payments. The purchase of a cap entitles the purchaser, to the extent that a specified index or other underlying financial measure exceeds a predetermined value on a predetermined date or dates, to receive payments on a notional principal amount from the party selling the cap. The purchase of a floor entitles the purchaser, to the extent that a specified index or other underlying financial measure falls or other underlying measure below a predetermined value on a predetermined date or dates, to receive payments on a notional principal amount from the party selling the floor. A collar combines elements of a cap and a floor.

Swap agreements and similar transactions can be individually negotiated and structured to include exposure to a variety of different types of investments or market factors. A swap agreement may be structured with reference to an index of securities that is created and maintained by the swap counterparty. Depending on their structures, swap agreements may increase or decrease the fund's exposure to long-or short-term interest rates (in the United States or abroad), foreign currency values, mortgage securities, mortgage rates, corporate borrowing rates, or other factors such as security prices, inflation rates or the volatility of an index or one or more securities. For example, if the fund agrees to exchange payments in U.S. dollars for payments in a non-U.S. currency, the swap agreement would tend to decrease the fund's exposure to U.S. interest rates and increase its exposure to that non-U.S. currency and interest rates.

The fund may also engage in total return swaps, in which payments made by the fund or the counterparty are based on the total return of a particular reference asset or assets (such as an equity or fixed-income security, a combination of such securities, or an index). Total return swap agreements may be used to obtain exposure to a security, commodity, or market without owning or taking physical custody of such security or investing directly in such market. The fund may also enter into swap agreements on futures contracts including, but not limited to, index futures contracts. Swap agreements on futures contracts are generally subject to the same risks involved in the fund's use of futures contracts, in addition to the risks involved in the fund's use of swap agreements. See "Futures Contracts and Related Options." A total return swap, or a swap on a futures contract, may add leverage to a portfolio by providing investment exposure to an underlying asset or market where the fund does not own or take physical custody of such asset or invest directly in such market.

The value of the fund's swap positions would increase or decrease depending on the changes in value of the underlying rates, currency values, volatility or other indices or measures. Caps and floors have an effect similar to buying or writing options. Depending on how they are used, swap agreements may increase or decrease the overall volatility of the fund's investments and its share price. The fund's ability to engage in certain swap transactions may be limited by tax considerations.

The fund's ability to realize a profit from such transactions will depend on the ability of the financial institutions with which it enters into the transactions to meet their obligations to the fund. If a counterparty's creditworthiness declines, the value of the agreement would be likely to decline, potentially resulting in losses. If a default occurs by the other party to such transaction, the fund will have contractual remedies pursuant to the agreements related to the transaction, which may be limited by applicable law in the case of a counterparty's insolvency. If the returns of an index upon which a swap is based are unavailable or cannot be calculated (including where the index is created and maintained by the swap counterparty), the fund may experience difficulty in valuing the swap or in determining the amounts owed to or by the counterparty, regardless of whether the counterparty has defaulted. Under certain circumstances, suitable transactions may not be available to the fund, or the fund may be unable to close out its position under such transactions at the same time, or at the same price, as if it had purchased comparable publicly traded securities. Swaps carry counterparty risks that cannot be fully anticipated. Also, because swap transactions typically involve a contract between the two parties, such swap investments can be extremely illiquid, as it is uncertain as to whether another counterparty would wish to take assignment of the rights under the swap contract at a price acceptable to the fund.

The fund's investments in swaps will generate ordinary income and losses for federal income tax purposes and may cause the fund to recognize income without receiving cash with which to make the distributions necessary to qualify and be eligible for treatment as a regulated investment company and avoid a fund-level tax. The fund may therefore need to liquidate other investments, including when it is not advantageous to do so, to meet its distribution requirement. The fund is not permitted to carry forward any net ordinary losses it realizes in a taxable year to offset ordinary income it realizes in subsequent taxable years.

A credit default swap is an agreement between the fund and a counterparty that enables the fund to buy or sell protection against a credit event related to a particular issuer. One party, acting as a "protection buyer," makes periodic payments to the other party, a "protection seller," in exchange for a promise by the protection seller to make a payment to the protection buyer if a negative credit event (such as a delinquent payment or default) occurs with respect to a referenced bond or group of bonds.

Credit default swaps may also be structured based on the debt of a basket of issuers, rather than a single issuer, and may be customized with respect to the default event that triggers purchase or other factors (for example, the Nth default within a basket, or defaults by a particular combination of issuers within the basket, may trigger a payment obligation). The fund may enter into credit default swap contracts for investment purposes. As a credit protection seller in a credit default swap contract, the fund would be required to pay the par (or other agreed-upon) value of a referenced debt obligation to the counterparty in the event of a default by a third party, such as a U.S. or non-U.S. corporate issuer, on the debt obligation. In return for its obligation, the fund would receive from the counterparty a periodic stream of payments over the term of the contract provided that no event of default has occurred. If no default occurs, the fund would keep the stream of payments and would have no payment obligations to the counterparty. As the seller, the fund would be subject to investment exposure on the notional amount of the swap.

The fund may also invest in credit default swap contracts or credit default swap indexes to hedge against the risk of default of the debt of a particular issuer or basket of issuers or to attempt to profit from changes or perceived changes in the creditworthiness of the particular issuer(s) (also known as "buying credit protection") or to hedge against equity market risk or other non-credit risks. In these cases, the fund would function as the counterparty referenced in the preceding paragraph. This would involve the risk that the investment may expire worthless and would only generate income in the event of an actual default by the issuer(s) of the underlying obligation(s) (or, as applicable, a credit downgrade or other indication of financial instability). It would also involve the risk that the seller may fail to satisfy its payment obligations to the fund in the event of a default. The purchase of credit default swaps involves costs, which will reduce the fund's return.

Credit default swaps involve a number of special risks. A protection seller may have to pay out amounts following a negative credit event greater than the value of the reference obligation delivered to it by its counterparty and the amount of periodic payments previously received by it from the counterparty. When the fund acts as a seller of a credit default swap, it is exposed to, among other things, leverage risk because if an event of default occurs the seller must pay the buyer the full notional value of the reference obligation. Each party to a credit default swap is subject to the credit risk of its counterparty (the risk that its counterparty may be unwilling or unable to perform its obligations on the swap as they come due). The value of the credit default swap to each party will change based on changes in the actual or perceived creditworthiness of the underlying issuer.

A protection buyer may lose its investment and recover nothing should an event of default not occur. The fund may seek to realize gains on its credit default swap positions, or limit losses on its positions, by selling those positions in the secondary market. There can be no assurance that a liquid secondary market will exist at any given time for any particular credit default swap or for credit default swaps generally.

The market for credit default swaps has at times become more volatile as the creditworthiness of certain counterparties has been questioned and/or downgraded. The parties to a credit default swap are generally required to post collateral to each other. If the fund posts initial or periodic collateral to its counterparty, it may not be able to recover that collateral from the counterparty in accordance with the terms of the swap. In addition, if the fund receives collateral from its counterparty, it may be delayed or prevented from realizing on the collateral in the event of the insolvency or bankruptcy of the counterparty. The fund may exit its obligations under a credit default swap by terminating the contract and paying applicable breakage fees, by selling its position in the secondary market, or by entering into an offsetting credit default swap position, which may cause the fund to incur more losses.

The fund may also enter into options on swap agreements ("swaptions"). A swaption is a contract that gives a counterparty the right (but not the obligation) to enter into a new swap agreement or to shorten, extend, cancel or otherwise modify an existing swap agreement, at some designated future time on specified terms. The fund may purchase and write (sell) put and call swaptions to the same extent it may make use of standard options on securities or other instruments. Swaptions are generally subject to the same risks involved in the fund's use of options. See "Options on Securities."

Many over-the-counter derivatives (including many swaps) are complex and their valuation often requires subjective modeling and judgment, which increases the risk of mispricing or incorrect valuation. The pricing models used may not produce valuations that are consistent with the values the fund realizes when it closes or sells an over-the-counter derivative. Valuation risk is more pronounced when the fund enters into over-the-counter derivatives with specialized terms because the market value of those derivatives in some cases is determined in part by reference to similar derivatives with more standardized terms. Incorrect valuations may result in increased cash payment requirements to counterparties, undercollateralization and/or errors in calculation of the fund's NAV.

Tax-exempt Securities

General description. As used in this SAI, the term "Tax-exempt Securities" includes debt obligations issued by a state, a territory or possession of the United States, the District of Columbia, Puerto Rico, Guam and their political subdivisions (for example, counties, cities, towns, villages, districts and authorities), agencies, instrumentalities or other governmental units, the interest from which is, in the opinion of bond counsel, exempt from federal income tax and (if applicable) the corresponding state's personal income tax. Such obligations are issued to obtain funds for various public purposes, including the construction of a wide range of public facilities, such as airports, bridges, highways, housing, hospitals, mass transportation, schools, streets and water and sewer works. Other public purposes for which Tax-exempt Securities may be issued include to refund of outstanding obligations, to obtain funds for general operating expenses, or to obtain funds to lend to other public institutions and facilities in anticipation of the receipt of revenue or the issuance of other obligations.

Tax-exempt Securities can be classified into two principal categories, including "general obligation" bonds and other securities and "revenue" bonds and other securities. General obligation bonds are secured by the issuer's full faith, credit and taxing power for the payment of principal and interest. Revenue securities are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise tax or other specific revenue source, such as the user of the facility being financed. Tax-exempt Securities may be structured as fixed-, variable- or floating-rate obligations or as zero-coupon, payment-in-kind and step-coupon securities and may be privately placed or publicly offered.

Short-term Tax-exempt Securities are generally issued by state and local governments and public authorities as interim financing in anticipation of tax collections, revenue receipts or bond sales to finance such public purposes.

In addition, certain types of "private activity" bonds may be issued by public authorities to finance projects of privately-owned entities, such as privately - operated housing facilities; certain local facilities for supplying water, gas or electricity; sewage or solid waste disposal facilities; student loans; or public or private institutions for the construction of educational, hospital, housing and other facilities. Such obligations are included within the term Tax-exempt Securities if the interest paid thereon is, in the opinion of bond counsel, exempt from federal income tax and (if applicable) state personal income tax (such interest may, however, be subject to federal alternative minimum tax). Other types of private activity bonds, the proceeds of which are used for the construction, repair or improvement of, or to obtain equipment for, privately operated industrial or commercial facilities, may also constitute Tax-exempt Securities, although the current federal tax laws place substantial limitations on the size of such issues. The credit quality of private activity bonds is usually directly related to the credit standing of the corporate user of the facility involved.

Tax-exempt Securities share many of the structural features and risks of other bonds, as described elsewhere in this SAI. For example, the fund may purchase callable Tax-exempt Securities, zero-coupon Tax-exempt Securities, or "stripped" Tax-exempt Securities, which entail additional risks. The fund may also purchase structured or asset-backed Tax-exempt Securities, such as the securities (including preferred stock) of special purpose entities that hold interests in the Tax-exempt Securities of one or more issuers and issue "tranched" securities that are entitled to receive payments based on the cash flows from those underlying securities. See "Redeemable securities," "-Zero-coupon and Payment-in-kind Bonds," "-Structured investments," and "Mortgage-backed and Asset-backed Securities" in this SAI. Structured Tax-exempt Securities may involve increased risk that the interest received by the fund may not be exempt from federal or state income tax, or that such interest may result in liability for the alternative minimum tax for shareholders of the fund. For example, in certain cases, the issuers of certain securities held by a special purpose entity may not have received an unqualified opinion of bond counsel that the interest from the securities will be exempt from federal income tax and (if applicable) the corresponding state's personal income tax.

Even though Tax-exempt Securities are interest-bearing investments that promise a stable flow of income, their prices are generally inversely affected by changes in interest rates and, therefore, are subject to the risk of market price fluctuations. The values of Tax-exempt Securities with longer remaining maturities typically fluctuate more than those of similarly rated Tax-exempt Securities with shorter remaining maturities. The values of Tax-exempt Securities also may be affected by changes in their actual or perceived credit quality. The credit quality of Tax-exempt Securities can be affected by, among other things, the financial condition of the issuer or guarantor, the issuer's future borrowing plans and sources of revenue, the economic feasibility of the revenue bond project or general borrowing purpose, political or economic developments in the state or region where the security is issued, and the liquidity of the security. The amount of information about the financial condition of an issuer of Tax-exempt Securities may not be as extensive as that which is made available by corporations whose securities are publicly traded. As a result, the achievement of the fund's goals is more dependent on the Investment Manager's investment analysis than would be the case if the fund were investing in securities of better-known issuers. In addition, Tax-exempt Securities may be harder to value than securities issued by corporations that are publicly traded.

The secondary market for some Tax-exempt Securities issued within a state (including issues that are privately placed with the fund) is less liquid than that for taxable debt obligations or other more widely traded municipal obligations. No established resale market exists for certain of the Tax-exempt Securities in which the fund may invest. The market for Tax-exempt Securities rated below investment grade is also likely to be less liquid than the market for higher rated obligations. As a result, the fund may be unable to dispose of these municipal obligations at times when it would otherwise wish to do so at the prices at which they are valued.

Tax-exempt Securities Issued by the Commonwealth of Puerto Rico. Tax-exempt Securities issued by the Commonwealth of Puerto Rico or its political subdivisions, agencies, instrumentalities, or public corporations may be affected by economic, market, political, and social conditions in Puerto Rico. Puerto Rico has recently experienced (and may in the future experience) significant fiscal and economic challenges, including substantial debt service obligations, high levels of unemployment, underfunded public retirement systems, and persistent government budget deficits. These challenges may negatively affect the value of the fund's investments in Puerto Rico Tax-Exempt Securities. Major ratings agencies have downgraded the general obligation debt of Puerto Rico to below investment grade and continue to maintain a negative outlook for this debt, which increases the likelihood that the rating will be lowered further. In both August 2015 and January 2016, Puerto Rico defaulted on its debt by failing to make full payment due on its outstanding bonds, and there can be no assurance that Puerto Rico will be able to satisfy its future debt obligations. Further downgrades or defaults may place additional strain on the Puerto Rico economy and may negatively affect the value, liquidity, and volatility of the fund's investments in Puerto Rico Tax-exempt Securities. In 2016, the Puerto Rico Oversight, Management, and Economic Stability Act, known as "PROMESA," was signed into law. Among other things, PROMESA established a federally-appointed Oversight Board to oversee Puerto Rico's financial operations and provides Puerto Rico a path to restructuring its debts, thus increasing the risk that Puerto Rico may never pay off municipal indebtedness, or may pay only a small fraction of the amount owed. Proceedings under PROMESA remain ongoing, and it is unclear at this time how those proceedings will be resolved or what impact they will have on the value of a fund's investments in Puerto Rico municipal securities.

These challenges and uncertainties have been exacerbated by Hurricane Maria and the resulting natural disaster in Puerto Rico. In September 2017, Hurricane Maria struck Puerto Rico, causing major damage across the Commonwealth, including damage to its water, power, and telecommunications infrastructure. The length of time needed to rebuild Puerto Rico's infrastructure is unclear, but could amount to years, during which the Commonwealth is likely to be in an uncertain economic state. The full extent of the natural disaster's impact on Puerto Rico's economy and foreign investment in Puerto Rico is difficult to estimate.

Escrow-secured or pre-refunded bonds. These securities are created when an issuer uses the proceeds from a new bond issue to buy high grade, interest-bearing debt securities, generally direct obligations of the U.S. government, in order to redeem (or "pre-refund"), before maturity, an outstanding bond issue that is not immediately callable. These securities are then deposited in an irrevocable escrow account held by a trustee bank to secure all future payments of principal and interest on the pre-refunded bond until that bond's call date. Pre-refunded bonds often receive an 'AAA' or equivalent rating. Because pre-refunded bonds still bear the same interest rate, and have a very high credit quality, their price may increase. However, as the original bond approaches its call date, the bond's price will fall to its call price. The escrow account securities pledged to pay the principal and interest of the pre-refunded municipal bonds held by the fund nonetheless still subject the fund to interest rate risk and market risk. In addition, while a secondary market exists for pre-refunded municipal bonds, if the fund sells pre-refunded municipal bonds prior to maturity, the price received may be more or less than the original cost, depending on market conditions at the time of sale. The interest on pre-refunded bonds issued on or before December 31, 2017 is exempt from federal income tax; the interest on such bonds issued after December 31, 2017 is not exempt from federal income tax.

Low Income Housing Tax Credits. The fund may invest in loans and other instruments tied to the Low Income Housing Tax Credit ("LIHTC") program, which seeks to increase the supply of affordable housing by offering tax credits to projects that rehabilitate or create new affordable rental properties. LIHTCs offer investors a dollar-for-dollar reduction in their federal tax liability to incentivize the construction and rehabilitation of affordable housing properties. Certain of these investments may be issued, or are guaranteed or insured, by agencies or instrumentalities of the U.S. government, such as Fannie Mae or Freddie Mac, while other such investments may be issued by non-governmental entities and therefore not guaranteed or insured.

The LIHTC program requires ongoing compliance with numerous eligibility requirements. Failure to comply with these requirements, including failures by persons other than the fund or which are outside the fund's control, may result in recapture of some or all of the related tax credits as well as the possibility of the loss of future credits. In addition to a recapture of credits and the potential loss of future credits, failure to comply with such eligibility requirements may trigger a default event on the

underlying bonds. The fund's investments in loans or other instruments tied to LIHTCs are subject to many of the risks facing other fixed income investments, including interest rate, credit, and prepayment risk.

Tender option bonds. The fund may invest in tender option bonds ("TOBs"), which are created by depositing municipal securities in a trust and dividing the income stream of an underlying municipal bond in two parts, one, a variable rate security and the other, a TOB. The interest rate for the variable rate security is determined by an index or a periodic auction process, while the TOB holder receives the balance of the income from the underlying municipal bond less an auction fee. The market prices of TOBs may be highly sensitive to changes in market rates and may decrease significantly when market rates increase. TOBs are subject to restrictions on resale and are highly sensitive to changes in interest rates and the value of the underlying bond. Generally, coupon income on TOBs will decrease when interest rates increase, and will increase when interest rates decrease. Such securities can have the effect of providing a degree of investment leverage, since they may increase or decrease in value in response to changes in market interest rates at a rate that is a multiple of the actual rate at which fixed-rate securities increase or decrease in response to such changes. As a result, the market values of such securities will generally be more volatile than the market values of fixed-rate securities.

Tobacco Settlement Revenue Bonds. The fund may invest in tobacco settlement revenue bonds, which are secured by an issuing state's proportionate share of periodic payments by tobacco companies made under the Master Settlement Agreement ("MSA"). The MSA is an agreement that was reached out of court in November 1998 between 46 states and six U.S. jurisdictions and tobacco manufacturers representing an overwhelming majority of U.S. market share in settlement of certain smoking-related litigation. The MSA provides for annual payments by the manufacturers to the states and jurisdictions in perpetuity in exchange for releasing all claims against the manufacturers and a pledge of no further litigation. The MSA established a base payment schedule and a formula for adjusting payments each year. Tobacco manufacturers pay into a master escrow trust based on their market share, and each state receives a fixed percentage of the payment as set forth in the MSA. Within some states, certain localities may in turn be allocated a specific portion of the state's MSA payment pursuant to an arrangement with the state.

A number of state and local governments have securitized the future flow of payments under the MSA by selling bonds pursuant to indentures, some through distinct governmental entities created for such purpose. The bonds are backed by the future revenue flow that is used for principal and interest payments on the bonds. Annual payments on the bonds, and thus risk to the fund, are dependent on the receipt of future settlement payments by the state or its instrumentality. The actual amount of future settlement payments may vary based on, among other things, annual domestic cigarette shipments, inflation, the financial capability of participating tobacco companies, and certain offsets for disputed payments. Payments made by tobacco manufacturers could be reduced if cigarette shipments continue to decline below the base levels used in establishing manufacturers' payment obligations under the MSA. Demand for cigarettes in the U.S. could continue to decline based on many factors, including, without limitation, anti-smoking campaigns, tax increases, price increases implemented to recoup the cost of payments by tobacco companies under the MSA, reduced ability to advertise, enforcement of laws prohibiting sales to minors, elimination of certain sales venues such as vending machines, the spread of local ordinances restricting smoking in public places, and increases in the use of other nicotine delivery devices (such as electronic cigarettes, smoking cessation products, and smokeless tobacco).

Because tobacco settlement bonds are backed by payments from the tobacco manufacturers, and generally not by the credit of the state or local government issuing the bonds, their creditworthiness depends on the ability of tobacco manufacturers to meet their obligations. The bankruptcy of an MSA-participating manufacturer could cause delays or reductions in bond payments, which would affect the fund's net asset value. Under the MSA, a market share loss by MSA-participating tobacco manufacturers to non-MSA participating manufacturers would also cause a downward adjustment in the payment amounts under some circumstances.

The MSA and tobacco manufacturers have been and continue to be subject to various legal claims, including, among others, claims that the MSA violates federal antitrust law. In addition, the United States Department of Justice has alleged in a civil lawsuit that the major tobacco companies defrauded and misled the American public about the health risks associated with smoking cigarettes. An adverse outcome to this lawsuit or to any other litigation matters or regulatory actions relating to the MSA or affecting tobacco manufacturers could adversely affect the payment streams associated with the MSA or cause delays or reductions in bond payments by tobacco manufacturers.

In addition to the risks described above, tobacco settlement revenue bonds are subject to other risks described in this SAI, including the risks of asset-backed securities discussed under "Mortgage-backed and Asset-backed Securities."

Participation interests (Money Market Funds only). The money market funds may invest in Tax-exempt Securities either by purchasing them directly or by purchasing certificates of accrual or similar instruments evidencing direct ownership of interest payments or principal payments, or both, on Tax-exempt Securities, provided that, in the opinion of counsel, any discount accruing on a certificate or instrument that is purchased at a yield not greater than the coupon rate of interest on the related Tax-exempt Securities will be exempt from federal income tax to the same extent as interest on the Tax-exempt Securities. The money market funds may also invest in Tax-exempt Securities by purchasing from banks participation interests in all or part of specific holdings of Tax-exempt Securities. These participations may be backed in whole or in part by an irrevocable letter of credit or guarantee of the selling bank. The selling bank may receive a fee from the money market funds in connection with the arrangement. The money market funds will not purchase such participation interests unless it receives an opinion of counsel or a ruling of the IRS that interest earned by it on Tax-exempt Securities in which it holds such participation interests is exempt from federal income tax. No money market fund expects to invest more than 5% of its assets in participation interests.

Stand-by commitments. When the fund purchases Tax-exempt Securities, it has the authority to acquire stand-by commitments from banks and broker-dealers with respect to those Tax-exempt Securities. A stand-by commitment is a right acquired by the fund to sell up to the principal amount of such Tax-exempt Securities back to the seller or a third party (typically an institution such as a bank or broker-dealer) at an agreed-upon price or yield within specified periods prior to their maturity dates. A stand-by commitment may be considered a security independent of the Tax-exempt security to which it relates. The amount payable by a bank or dealer during the time a stand-by commitment is exercisable, absent unusual circumstances, would be substantially the same as the market value of the underlying Tax-exempt security to a third party at any time. The fund expects that stand-by commitments generally will be available without the payment of direct or indirect consideration. The fund does not expect to assign any value to stand-by commitments when determining the fund's net asset value. The fund will be subject to credit risk with respect to an institution providing a stand-by commitment and a decline in the credit quality of the institution could cause losses to the fund.

Yields. The yields on Tax-exempt Securities depend on a variety of factors, including general money market conditions, effective marginal tax rates, the financial condition of the issuer, general conditions of the Tax-exempt security market, the size of a particular offering, the maturity of the obligation and the rating of the issue. The ratings of nationally recognized securities rating agencies represent their opinions as to the credit quality of the Tax-exempt Securities which they undertake to rate. It should be emphasized, however, that ratings are general and are not absolute standards of quality. Consequently, Tax-exempt Securities with the same maturity, interest rate and rating may have different yields while Tax-exempt Securities of the same maturity and interest rate but with different ratings may have the same yield. Yield disparities may occur for reasons not directly related to the investment quality of particular issues or the general movement of interest rates and may be due to such factors as changes in the overall demand or supply of various types of Tax-exempt Securities or changes in the investment objectives of investors. Subsequent to purchase by the fund, an issue of Tax-exempt Securities or other investments may cease to be rated, or its rating may be reduced below the minimum rating required for purchase by the fund. The Investment Manager will consider such an event in its determination of whether the fund should continue to hold an investment in its portfolio. Downgrades of Tax-exempt Securities held by a money market fund may require the fund to sell such securities, potentially at a loss.

"Moral obligation" bonds. The fund may invest in so-called "moral obligation" bonds, where repayment of the bond is backed by a moral (but not legally binding) commitment of an entity other than the issuer, such as a state legislature, to pay. Such a commitment may be in addition to the legal commitment of the issuer to repay the bond or may represent the only payment obligation with respect to the bond (where, for example, no amount has yet been specifically appropriated to pay the bond. See "- Municipal leases" below.)

Municipal leases. The fund may acquire participations in lease obligations or installment purchase contract obligations (collectively, "lease obligations") of municipal authorities or entities. A lease obligation is an obligation in the form of a lease or installment purchase that is issued by a state or local government to acquire equipment and facilities. Income from such obligations generally is exempt from state and local tax in the state of issuance. Lease obligations may be secured or unsecured. Lease obligations do not constitute general obligations of the municipality for which the municipality's taxing power is pledged.

Municipal leases may be subject to greater risks than general obligation or revenue bonds. Although lease obligations do not constitute general obligations of the municipality, a lease obligation ordinarily is backed by the municipality's covenant to budget for, appropriate, and make the payments due under the lease obligation. However, certain of these lease obligations contain "non-appropriation" clauses, which provide that the municipality has no obligation to make lease or installment purchase payments in future years unless money is appropriated for such purpose on a yearly basis. In the case of a "non-appropriation" lease, the fund's ability to recover under the lease in the event of non-appropriation or default will be limited solely to the

repossession of the leased property, and in any event, foreclosure of that property might prove difficult. If a municipality does not fulfill its payment obligation, it may be difficult to sell the lease obligation and the proceeds of a sale may not cover the fund's loss.

In addition to the "non-appropriation" risk, many municipal lease obligations have not yet developed the depth of marketability associated with municipal bonds. Moreover, such leases may be subject to the temporary abatement of payments in the event the issuer is prevented from maintaining occupancy of the leased premises or utilizing the leased equipment or facilities. Although the obligations may be secured by the leased equipment or facilities, the disposition of the property in the event of non-appropriation or foreclosure might prove difficult, time consuming and costly, and result in a delay in recovering, or the failure to recover fully, the fund's original investment.

Additional risks. Securities in which the fund may invest, including Tax-exempt Securities, are subject to the provisions of bankruptcy, insolvency and other laws affecting the rights and remedies of creditors, such as the federal Bankruptcy Code (including special provisions related to municipalities and other public entities), and laws, if any, that may be enacted by Congress or state legislatures extending the time for payment of principal or interest, or both, or imposing other constraints upon enforcement of such obligations. There is also the possibility that, as a result of litigation or other conditions, such as the recent bankruptcy-type proceedings by the Commonwealth of Puerto Rico the power, ability or willingness of issuers to meet their obligations for the payment of interest and principal on their Tax-exempt Securities may be materially affected or their obligations may be found to be invalid or unenforceable. Such litigation or conditions may from time to time have the effect of introducing uncertainties in the market for municipal bonds or certain segments thereof, or of materially affecting the credit risk with respect to particular bonds. Adverse economic, business, legal or political developments might affect all or a substantial portion of the fund's municipal bonds in the same manner.

From time to time, legislation may be introduced or litigation may arise that may restrict or eliminate the federal income tax exemption for interest on debt obligations issued by states and their political subdivisions. Federal tax laws limit the types and amounts of tax-exempt bonds issuable for certain purposes, especially industrial development bonds and private activity bonds. Such limits may affect the future supply and yields of these types of Tax-exempt Securities. Further proposals limiting the issuance of Tax-exempt Securities may well be introduced in the future. Shareholders should consult their tax advisors for the current law on tax-exempt bonds and securities.

Temporary Defensive Strategies

In response to adverse market, economic, political or other conditions, the fund may take temporary defensive positions that are inconsistent with its principal investment strategies. However, a fund may choose not to use these temporary defensive strategies for a variety of reasons, even in very volatile market conditions. In implementing temporary defensive strategies, the fund may invest primarily in, among other things, debt securities, preferred stocks, U.S. government and agency obligations, cash or money market instruments (including, to the extent permitted by law or applicable exemptive relief, money market funds), or any other securities the Investment Manager considers consistent with such defensive strategies. When the fund takes temporary defensive positions, the fund may miss out on investment opportunities, and the fund may not achieve its investment objective. In addition, while temporary defensive strategies are mainly designed to limit losses, such strategies may not work as intended.

Trade Policy

In 2025, the U.S. government indicated its intent to alter its approach to international trade policy and, in some cases, to renegotiate or potentially terminate certain existing bilateral or multilateral trade agreements and treaties with foreign countries and has made proposals and taken actions related thereto. In addition, the U.S. government has recently imposed tariffs on certain foreign goods and has indicated a willingness to impose tariffs on imports of other products. Some foreign governments, including China, have instituted retaliatory tariffs on certain U.S. goods and have indicated a willingness to impose additional tariffs on U.S. products. Other countries, including Mexico, have threatened retaliatory tariffs on certain U.S. products.

Global trade disruption, significant introductions of trade barriers, and bilateral trade frictions, together with any future downturns in the global economy resulting therefrom, could adversely affect the financial performance of the fund and its investments. Trade policy may be an ongoing source of instability, potentially resulting in significant currency fluctuations and/or having other adverse effects on international markets, international trade agreements, and/or other existing cross-border cooperation arrangements (whether economic, tax, fiscal, legal, regulatory, or otherwise). To the extent trade disputes escalate globally,

there could be additional significant impacts on the sectors or industries in which the fund invests and other adverse impacts on the fund's overall performance.

Warrants

The fund may invest in or acquire warrants, which are instruments that give the fund the right (but not the obligation) to purchase certain securities from an issuer at a specific price (the "strike price") until a stated expiration date. The purchase of warrants involves the risk that the effective price paid for the warrant added to the strike price of the underlying security may exceed the value of the security's market price, such as when there is no movement in the level of the underlying security. Also, the strike price of warrants typically is much lower than the current market price of the underlying securities, yet they are subject to similar price fluctuations. As a result, warrants may be more volatile investments than the underlying securities and may offer greater potential for capital appreciation as well as capital loss. Warrants do not entitle a holder to dividends or voting rights with respect to the underlying securities and do not represent any rights in the assets of the issuing company. Also, the value of the warrant does not necessarily change with the value of the underlying securities and a warrant ceases to have value if it is not exercised prior to the expiration date. These factors can make warrants more speculative than other types of investments.

In addition to warrants on securities, the fund may purchase put warrants and call warrants whose values vary depending on the change in the value of one or more specified securities indices ("index warrants"). Index warrants are generally issued by banks or other financial institutions and give the holder the right, at any time during the term of the warrant, to receive upon exercise of the warrant a cash payment from the issuer based on the value of the underlying index at the time of exercise. In general, if the value of the underlying index rises above the exercise price of the index warrant, the holder of a call warrant will be entitled to receive a cash payment from the issuer upon exercise based on the difference between the value of the index and the exercise price of the warrant; if the value of the underlying index falls, the holder of a put warrant will be entitled to receive a cash payment from the issuer upon exercise based on the difference between the exercise price of the warrant and the value of the index. The holder of a warrant would not be entitled to any payments from the issuer at any time when, in the case of a call warrant, the exercise price is greater than the value of the underlying index, or, in the case of a put warrant, the exercise price is less than the value of the underlying index. If the fund were not to exercise an index warrant prior to its expiration, then the fund would lose the amount of the purchase price paid by it for the warrant.

The fund will normally use index warrants in a manner similar to its use of options on securities indices. The risks of the fund's use of index warrants are generally similar to those relating to its use of index options. Unlike most index options, however, index warrants are issued in limited amounts and are not obligations of a regulated clearing agency, but are backed only by the credit of the bank or other institution which issues the warrant. Also, index warrants generally have longer terms than index options. Index warrants are not likely to be as liquid as certain index options backed by a recognized clearing agency. In addition, the terms of index warrants may limit the fund's ability to exercise the warrants at such time, or in such quantities, as the fund would otherwise wish to do.

Zero-coupon and Payment-in-kind Bonds

The fund may invest without limit in so-called "zero-coupon" bonds and "payment-in-kind" bonds. Zero-coupon bonds are issued at a significant discount from their principal amount in lieu of paying interest periodically. Payment-in-kind bonds allow the issuer, at its option, to make current interest payments on the bonds either in cash or in additional bonds. Because zero-coupon and payment-in-kind bonds do not pay current interest in cash, their value is subject to greater fluctuation in response to changes in market interest rates than bonds that pay interest currently. Both zero-coupon and payment-in-kind bonds allow an issuer to avoid the need to generate cash to meet current interest payments. Accordingly, such bonds may involve greater credit risks than bonds paying interest currently in cash. The fund is required to accrue interest income on such investments and to distribute such amounts at least annually to shareholders even though such bonds do not pay current interest in cash. Thus, it may be necessary at times for the fund to liquidate investments, including when it is not advantageous to do so, in order to satisfy its distribution requirements under the Code. The market for zero-coupon and payment-in-kind bonds may be limited, making it difficult for the fund to value them or dispose of its holdings quickly at an acceptable price.

INVESTMENT STRATEGIES APPLICABLE TO UNDERLYING FUNDS

The following discussion applies only to the underlying funds in which the Putnam Sustainable Retirement Funds invest.

Listing and Trading

Shares of each underlying fund have been approved for listing and trading on an exchange. Each underlying fund's shares trade on an exchange at prices that may differ to some degree from their NAV. The listing exchange may remove an underlying fund's shares from listing if (i) following the initial 12-month period beginning upon the commencement of trading of the underlying fund, there are fewer than 50 beneficial owners of the underlying fund's shares; (ii) the listing exchange becomes aware that the underlying fund is no longer eligible to operate in reliance on Rule 6c-11 under the 1940 Act or in the case of Putnam Sustainable Leaders ETF and Putnam Sustainable Future ETF (the "Semi-Transparent ETFs"), either the Tracking Basket (as defined below) or the holdings of the portfolio are not made available to all market participants at the same time; (iii) the underlying fund no longer complies with certain listing exchange rules; or (iv) such other event shall occur or condition exists that, in the opinion of the listing exchange, makes further dealings on the exchange inadvisable. In the case of the Semi-Transparent ETFs, the listing exchange may also remove an underlying fund's shares from listing if (i) a fund has failed to file any filings required by the SEC or listing exchange is aware that an underlying fund is not in compliance with the conditions of any exemptive order or no-action relief granted by the SEC with respect to the underlying fund; (ii) certain ongoing listing requirements are not continuously maintained; (iii) any of the representations made by a fund in connection with its listing order are not continuously met.

The "Tracking Basket," which each Semi-Transparent ETF publishes each business day on its website, is designed to closely track the daily performance of the Semi-Transparent ETF but is not the Semi-Transparent ETF's actual portfolio. The Tracking Basket is comprised of: (1) select recently disclosed portfolio holdings and/or select securities from the universe from which the Semi- Transparent ETF's investments are selected ("Strategy Components"); (2) liquid ETFs that convey information about the types of instruments (that are not otherwise fully represented by the Strategy Components) in which the Semi-Transparent ETF invests; and (3) cash and cash equivalents.

The listing exchange will remove an underlying fund's shares from listing and trading upon termination of the trust. There can be no assurance that the requirements of the listing exchange necessary to maintain the listing of the underlying fund's shares will continue to be met. As in the case of other publicly-traded securities, brokers' commissions on transactions will be based on negotiated commission rates at customary levels. The existence of a liquid trading market for certain securities may depend on whether dealers will make a market in such securities. There can be no assurance that such a market will be made or maintained or that any such market will be or remain liquid. The price at which securities may be sold and the value of the underlying fund's shares will be adversely affected if trading markets for the underlying fund's portfolio securities are limited or absent, or if bid/ask spreads are wide.

Each Semi-Transparent ETF, unlike other actively managed ETFs that publish their portfolio holdings on a daily basis, does not publicly disclose the composition of its portfolio each business day, which may affect the price at which shares of each Semi-Transparent ETF trade in the secondary market. Given the differences between each Semi-Transparent ETF and ETFs that disclose their complete holdings daily, there is a risk that market prices of each Semi-Transparent ETF may vary significantly from NAV, and that each Semi-Transparent ETF's shares may trade at a wider bid/ask spread – and therefore cost investors more to trade – than shares of other ETFs. These risks are heightened during periods of market disruption or volatility. In addition, although each Semi-Transparent ETF seeks to benefit from keeping its portfolio information secret, market participants may attempt to use the Tracking Basket to identify each Semi-Transparent ETF's trading strategy. If successful, this could result in such market participants engaging in certain predatory trading practices that may have the potential to harm the Semi-Transparent ETF and its shareholders, such as front running each Semi-Transparent ETF's trades of portfolio securities.

Commodity Pools, Currency Trusts, and Metal Trusts

Exchange-traded commodity pools may invest heavily in futures, commodities, and other derivatives. These exchange-traded commodity pools may use financial leverage, which may cause greater gains and losses. The underlying funds are exposed to risks related to market, leverage, imperfect correlations with underlying investments or the portfolio holdings, price volatility, counterparty risk, liquidity, valuation, and regulatory risks.

Exchange-traded currency trusts are exposed to fluctuations in foreign exchange rate risks; global and regional political, regulatory, economic situations; inflation risk; and volatile interest rates.

Exchange-traded metal trusts may invest and hold some or all assets in metals, such as gold and silver. The investments may include physical assets of the trust or investments in the form of derivatives, such as spots, forwards and futures. The trusts may also invest in industries associated with metal production, such as mine production. The investments are subject to a number of

risks. The underlying value of the metals; international, economic, monetary and political factors, many of which are unpredictable; and changing tax, royalty, land and mineral rights ownership and leasing regulations in metal producing countries.

Investing in exchange-traded commodity pools and exchange-traded metal trusts may indirectly expose the fund to risks similar to those described in "Commodities and Commodity-Related Investments," "Derivatives," "Futures Contracts and Related Options," and "Swap Agreements" herein.

Business development companies ("BDCs")

BDCs are a type of closed-end fund regulated under the 1940 Act, which typically invest in and lend to small-and medium-sized private companies that may lack access to public equity markets for capital raising. Under the 1940 Act, BDCs must invest at least 70% of the value of their total assets in certain asset types, which are typically the securities of private U.S. businesses. Additionally, BDCs must make available significant managerial assistance to the issuers of such securities. BDCs are not taxed on income distributed to shareholders provided they qualify as a regulated investment company under the Code. The underlying funds will indirectly bear their proportionate share of any management and other expenses charged by the BDCs in which they invest.

Because BDCs typically invest in small and medium-sized companies, a BDC's portfolio is subject to the risks inherent in investing in smaller companies, including that portfolio companies may be dependent on a small number of products or services and may be more adversely affected by poor economic or market conditions. Some BDCs invest substantially, or even exclusively, in one sector or industry group and therefore the BDC may be susceptible to adverse conditions and economic or regulatory occurrences affecting the sector or industry group, which tends to increase volatility and result in higher risk. Investments in BDCs are also subject to management risk, including management's ability to meet the BDC's investment objective, and management's ability to manage the BDC's portfolio during periods of market turmoil and as investors' perceptions regarding a BDC or its underlying investments change.

TAXES

The following discussion of U.S. federal income tax consequences is based on the Code, existing U.S. Treasury regulations, and other applicable authority, as of the date of this SAI. These authorities are subject to change by legislative or administrative action, possibly with retroactive effect. The following discussion is only a summary of some of the important U.S. federal income tax considerations generally applicable to investments in the fund. There may be other tax considerations applicable to particular shareholders. Shareholders should consult their own tax advisors regarding their particular situation and the possible application of foreign, state and local tax laws.

Taxation of the fund. The fund has elected and intends to qualify each year as a regulated investment company under Subchapter M of the Code. In order to qualify for the special tax treatment accorded regulated investment companies and their shareholders, the fund must, among other things:

(a) derive at least 90% of its gross income for each taxable year from (i) dividends, interest, payments with respect to certain securities loans, and gains from the sale or other disposition of stock, securities or foreign currencies, or other income (including but not limited to gains from options, futures, or forward contracts) derived with respect to its business of investing in such stock, securities or currencies, and (ii) net income from interests in "qualified publicly traded partnerships" (as defined below);

(b) diversify its holdings so that, at the end of each quarter of the fund's taxable year, (i) at least 50% of the market value of the fund's total assets is represented by cash and cash items (including receivables), U.S. government securities, securities of other regulated investment companies, and other securities limited in respect of any one issuer to a value not greater than 5% of the value of the fund's total assets and not more than 10% of the outstanding voting securities of such issuer, and (ii) not more than 25% of the value of the fund's total assets is invested, including through corporations in which the fund owns a 20% or more voting stock interest, (x) in the securities (other than those of the U.S. government or other regulated investment companies) of any one issuer or of two or more issuers which the fund controls and which are engaged in the same, similar, or related trades or businesses, or (y) in the securities of one or more qualified publicly traded partnerships (as defined below); and

(c) distribute with respect to each taxable year at least 90% of the sum of its investment company taxable income (as that term is defined in the Code without regard to the deduction for dividends paid—generally, taxable ordinary income and the excess, if any, of net short-term capital gains over net long-term capital losses) and net tax-exempt interest income, for such year.

In general, for purposes of the 90% gross income requirement described in paragraph (a) above, income derived from a partnership will be treated as qualifying income only to the extent such income is attributable to items of income of the partnership which would be qualifying income if realized by the regulated investment company. However, 100% of the net income of a regulated investment company derived from an interest in a "qualified publicly traded partnership" (defined as a partnership (i) interests in which are traded on an established securities market or readily tradable on a secondary market or the substantial equivalent thereof, and (ii) that derives less than 90% of its income from the qualifying income described in paragraph (a)(i) above) will be treated as qualifying income. In general, such entities will be treated as partnerships for federal income tax purposes because they meet the passive income requirement under Code section 7704(c)(2). In addition, although in general the passive loss rules of the Code do not apply to regulated investment companies, such rules do apply to a regulated investment company with respect to items attributable to an interest in a qualified publicly traded partnership.

For purposes of the diversification test in paragraph (b) above, identification of the issuer (or, in some cases, issuers) of a particular fund investment will depend on the terms and conditions of that investment. In some cases, identification of the issuer (or issuers) is uncertain under current law, and an adverse determination or future guidance by the IRS with respect to issuer identification for a particular type of investment may adversely affect the fund's ability to meet the diversification test in (b) above. Also, for the purposes of the diversification test in paragraph (b) above, the term "outstanding voting securities of such issuer" will include the equity securities of a qualified publicly traded partnership.

If the fund qualifies as a regulated investment company that is accorded special tax treatment, the fund will not be subject to U. S. federal income tax on income or gains distributed in a timely manner to its shareholders in the form of dividends (including Capital Gain Dividends, as defined below).

If the fund were to fail to meet the income, diversification or distribution test described above, the fund could in some cases cure such failure, including by paying a fund-level tax, paying interest, making additional distributions, or disposing of certain assets. If the fund were ineligible to or otherwise did not cure such failure for any year, or were otherwise to fail to qualify as a regulated investment company accorded special tax treatment in any taxable year, the fund would be subject to tax on its taxable income at corporate rates, and all distributions from earnings and profits, including any distributions of net tax-exempt income and net long-term capital gains, would be taxable to shareholders as ordinary income. Some portions of such distributions may be eligible for the dividends received deduction in the case of corporate shareholders, and may be eligible to be treated as "qualified dividend income" in the case of shareholders taxed as individuals, provided, in both cases, that the shareholder meets certain holding period and other requirements in respect of the fund's shares (as described below). In addition, the fund could be required to recognize unrealized gains, pay substantial taxes and interest and make substantial distributions before requalifying as a regulated investment company that is accorded special tax treatment.

The fund intends to distribute at least annually to its shareholders all or substantially all of its investment company taxable income (computed without regard to the dividends-paid deduction) and its net tax-exempt income (if any). The fund may distribute its net capital gain (that is, the excess of net long-term capital gain over net short-term capital loss, in each case determined with reference to any loss carryforwards). Investment company taxable income (which is retained by the fund) will be subject to tax at regular corporate rates. The fund may also retain for investment its net capital gain. If the fund retains any net capital gain, it will be subject to tax at regular corporate rates on the amount retained, but may designate the retained amount as undistributed capital gains in a notice to its shareholders who will be (i) required to include in income for U.S. federal income tax purposes, as long-term capital gain, their shares of such undistributed amount, and (ii) entitled to credit their proportionate shares of the tax paid by the fund on such undistributed amount against their U.S. federal income tax liabilities, if any, and to claim refunds on a properly-filed U.S. tax return to the extent the credit exceeds such liabilities. If the fund makes this designation, for U.S. federal income tax purposes, the tax basis of shares owned by a shareholder of the fund will be increased by an amount equal to the difference between the amount of undistributed capital gains included in the shareholder's gross income under clause (i) of the preceding sentence and the tax deemed paid by the shareholder under clause (ii) of the preceding sentence. The fund is not required to, and there can be no assurance the fund will, make this designation if it retains all or a portion of its net capital gain in a taxable year.

In determining its net capital gain, including in connection with determining the amount available to support a Capital Gain Dividend (as defined below), its taxable income and its earnings and profits, a regulated investment company generally may also

elect to treat part or all of any post-October capital loss (defined as any net capital loss attributable to the portion, if any, of the taxable year after October 31 or, if there is no such loss, the net long-term capital loss or net short-term capital loss attributable to any such portion of the taxable year) or late-year ordinary loss (generally, the sum of its (i) net ordinary loss, if any, from the sale, exchange or other taxable disposition of property, attributable to the portion, if any, of the taxable year after October 31, and its (ii) other net ordinary loss, if any, attributable to the portion, if any, of the taxable year after December 31) as if incurred in the succeeding taxable year.

If the fund fails to distribute in a calendar year at least an amount equal to the sum of 98% of its ordinary income for such year and 98.2% of its capital gain net income for the one-year period ending October 31 of such year, plus any retained amount from the prior year, the fund will be subject to a nondeductible 4% excise tax on the undistributed amounts. For these purposes, ordinary gains and losses from the sale, exchange, or other taxable disposition of property that would otherwise be properly taken into account after October 31 are treated as arising on January 1 of the following calendar year. For purposes of the excise tax, the fund will be treated as having distributed any amount on which it has been subject to corporate income tax in the taxable year ending within the calendar year. A dividend paid to shareholders in January of a year generally is deemed to have been paid by the fund on December 31 of the preceding year, if the dividend was declared and payable to shareholders of record on a date in October, November or December of that preceding year. The fund intends generally to make distributions sufficient to avoid imposition of the 4% excise tax, although there can be no assurance that it will be able to do so.

The fund distributes its net investment income and capital gains to shareholders as dividends at least annually to the extent required to qualify as a regulated investment company under the Code and generally to avoid U.S. federal income or excise tax. Provided it is not treated as a "personal holding company" for U.S. federal income tax purposes, the fund is permitted to treat the portion of redemption proceeds paid to redeeming shareholders that represents the redeeming shareholders' portion of the fund's accumulated earnings and profits as a dividend on the fund's tax return. This practice, which involves the use of tax equalization, will have the effect of reducing the amount of income and gains that the fund is required to distribute as dividends to shareholders in order for the fund to avoid U. S. federal income tax and excise tax. This practice may also reduce the amount of distributions required to be made to non-redeeming shareholders and the amount of any undistributed income will be reflected in the value of the shares of the fund; the total return on a shareholder's investment will not be reduced as a result of this distribution policy.

Fund distributions. Distributions from the fund (other than exempt-interest dividends, as discussed below) generally are taxable to shareholders as ordinary income to the extent derived from the fund's investment income and net short-term capital gains. Distributions are taxable whether shareholders receive them in cash or reinvest them in additional shares of the fund or other Putnam Funds. Distributions from Putnam Ultra Short MAC Fund, however, are paid only in cash.

Taxes on distributions of capital gains are determined by how long the fund owned (or is deemed to have owned) the investments that generated them, rather than how long a shareholder has owned his or her shares. In general, the fund will recognize long-term capital gain or loss on investments it has owned for more than one year, and short-term capital gain or loss on investments it has owned for one year or less. Tax rules can alter the fund's holding period in investments and thereby affect the tax treatment of gain or loss on such investments. Distributions of net capital gain that are properly reported by the fund as capital gain dividends ("Capital Gain Dividends") will be treated as long-term capital gains includible in net capital gain and taxed to individuals at reduced rates. The IRS and the Department of the Treasury have issued regulations that impose special rules in respect of Capital Gain Dividends received through partnership interests constituting "applicable partnership interests" under Section 1061 of the Code. Distributions from capital gains generally are made after applying any available capital loss carryforwards. Distributions of net short-term capital gain (as reduced by any net long-term capital loss for the taxable year) will be taxable to shareholders as ordinary income. Investors who purchase shares shortly before the record date of a distribution will pay the full price for the shares and then receive some portion of the price back as a taxable distribution.

The Code generally imposes a 3.8% Medicare contribution tax on the net investment income of certain individuals, trusts and estates to the extent their income exceeds certain threshold amounts. For these purposes, "net investment income" generally includes, among other things, (i) distributions paid by the fund of net investment income and capital gains (other than exempt-interest dividends) as described herein, and (ii) any net gain from the sale, redemption, exchange or other taxable disposition of fund shares. Shareholders are advised to consult their tax advisers regarding the possible implications of this additional tax on their investment in the fund.

Distributions of investment income reported by the fund as "qualified dividend income" received by an individual will be taxed at the reduced rates applicable to net capital gain. In order for some portion of the dividends received by a fund shareholder to be

qualified dividend income, the fund must meet holding period and other requirements with respect to some portion of the dividend-paying stocks in its portfolio and the shareholder must meet holding period and other requirements with respect to the fund's shares. In general, a dividend will not be treated as qualified dividend income (at either the fund or shareholder level) (1) if the dividend is received with respect to any share of stock held for fewer than 61 days during the 121-day period beginning on the date which is 60 days before the date on which such share becomes ex-dividend with respect to such dividend (or, in the case of certain preferred stock, 91 days during the 181-day period beginning 90 days before such date), (2) to the extent that the recipient is under an obligation (whether pursuant to a short sale or otherwise) to make related payments with respect to positions in substantially similar or related property, (3) if the recipient elects to have the dividend income treated as investment interest, or (4) if the dividend is received from a foreign corporation that is (a) not eligible for the benefits of a comprehensive income tax treaty with the United States (with the exception of dividends paid on stock of such a foreign corporation readily tradable on an established securities market in the United States) or (b) treated as a passive foreign investment company. Each fund, other than fixed-income and money market funds, generally expects to report eligible dividends as qualified dividend income.

In general, distributions of investment income reported by the fund as derived from qualified dividend income will be treated as qualified dividend income by a shareholder taxed as an individual provided the shareholder meets the holding period and other requirements described above with respect to such fund's shares. In any event, if the aggregate qualified dividends received by the fund during any taxable year are 95% or more of its gross income (excluding net long-term capital gain over net short-term capital loss), then 100% of the fund's dividends (other than dividends properly reported as Capital Gain Dividends) will be eligible to be treated as qualified dividend income.

Distributions by the fund to its shareholders that the fund properly reports as "section 199A dividends," as defined and subject to certain conditions described below, are treated as qualified REIT dividends in the hands of non-corporate shareholders.

Subject to future regulatory guidance to the contrary, distributions attributable to qualified publicly traded partnership income from a fund's investments in MLPs will ostensibly not qualify for the deduction available to non-corporate taxpayers in respect of such amounts received directly from an MLP.

In general, fixed-income and money market funds receive interest, rather than dividends, from their portfolio securities. As a result, it is not currently expected that any significant portion of such funds' distributions to shareholders will be derived from qualified dividend income. For information regarding qualified dividend income received from underlying funds, see "Funds of funds" below.

In general, dividends of net investment income received by corporate shareholders of the fund will qualify for the dividends-received deduction generally available to corporations only to the extent of the amount of eligible dividends received by the fund from domestic corporations for the taxable year. A dividend received by the fund will not be treated as a dividend eligible for the dividends-received deduction (1) if it has been received with respect to any share of stock that the fund has held for less than 46 days (91 days in the case of certain preferred stock) during the 91-day period beginning on the date which is 45 days before the date on which such share becomes ex-dividend with respect to such dividend (during the 181-day period beginning 90 days before such date in the case of certain preferred stock) or (2) to the extent that the fund is under an obligation (pursuant to a short sale or otherwise) to make related payments with respect to positions in substantially similar or related property. Moreover, the dividends received deduction may otherwise be disallowed or reduced (1) if the corporate shareholder fails to satisfy the foregoing requirements with respect to its shares of the fund or (2) by application of various provisions of the Code (for instance, the dividends-received deduction is reduced in the case of a dividend received on debt-financed portfolio stock (generally, stock acquired with borrowed funds)). For information regarding eligibility for the dividends-received deduction of dividend income derived from an underlying fund, see "Funds of funds" below.

Exempt-interest dividends. A fund will be qualified to pay exempt-interest dividends to its shareholders if, at the close of each quarter of the fund's taxable year, at least 50% of the total value of the fund's assets consists of obligations the interest on which is exempt from federal income tax under Section 103(a) of the Code. In some cases, the fund may also pass through to its shareholders the tax-exempt character of any exempt-interest dividends it receives from underlying funds in which it invests (see "Funds of funds," below). Distributions that the fund reports as exempt-interest dividends are treated as interest excludable from shareholders' gross income for federal income tax purposes but may be taxable for federal alternative minimum tax ("AMT") purposes and for state and local purposes. If the fund intends to qualify to pay exempt-interest dividends, the fund may be limited in its ability to enter into taxable transactions involving forward commitments, repurchase agreements, financial futures and options contracts on financial futures, tax-exempt bond indices and other assets.

Part or all of the interest on indebtedness, if any, incurred or continued by a shareholder to purchase or carry shares of the fund paying exempt-interest dividends is not deductible. The portion of interest that is not deductible is equal to the total interest paid or accrued on the indebtedness, multiplied by the percentage of the fund's total distributions (not including distributions from net long-term capital gains) paid to the shareholder that are exempt-interest dividends. Under rules used by the IRS to determine when borrowed funds are considered used for the purpose of purchasing or carrying particular assets, the purchase of shares may be considered to have been made with borrowed funds even though such funds are not directly traceable to the purchase of shares.

In general, exempt-interest dividends, if any, attributable to interest received on certain private activity obligations and certain industrial development bonds will not be tax-exempt to any shareholders who are "substantial users" of the facilities financed by such obligations or bonds or who are "related persons" of such substantial users.

A fund that is qualified to pay exempt-interest dividends will notify its shareholders in a written statement of the portion of distributions for the taxable year that constitutes exempt-interest dividends.

Exempt-interest dividends may be taxable for purposes of the federal AMT. For individual shareholders, exempt-interest dividends that are derived from interest on private activity bonds that are issued after August 7, 1986 (other than a "qualified 501(c)(3) bond," as such term is defined in the Code) generally must be included in an individual's tax base for purposes of calculating the shareholder's liability for U.S. federal AMT. For taxable years beginning after December 31, 2017, corporations are no longer subject to the federal AMT.

Funds of funds. If the fund invests in shares of underlying funds, a portion of its distributable income and gains will consist of distributions from the underlying funds and gains and losses on the disposition of shares of the underlying funds. To the extent that an underlying fund realizes net losses on its investments for a given taxable year, the fund will not be able to recognize its share of those losses (so as to offset distributions of net income or capital gains from other underlying funds) until and only to the extent that it disposes of shares of the underlying fund in a transaction qualifying for sale or exchange treatment or those losses reduce distributions required to be made by the underlying fund. Moreover, even when the fund does make such a disposition, a portion of its loss may be recognized as a long-term capital loss, which will not be treated as favorably for U.S. federal income tax purposes as a short-term capital loss or an ordinary deduction. In particular, the fund will not be able to offset any capital losses from its dispositions of underlying fund shares against its ordinary income (including distributions of any net short-term capital gains realized by an underlying fund).

In addition, in certain circumstances, the "wash sale" rules under Section 1091 of the Code may apply to the fund's sales of underlying fund shares that have generated losses. A wash sale occurs if shares of an underlying fund are sold by the fund at a loss and the fund acquires additional shares of that same underlying fund 30 days before or after the date of the sale. The wash-sale rules could defer losses in the fund's hands on sales of underlying fund shares (to the extent such sales are wash sales) for extended (and, in certain cases, potentially indefinite) periods of time.

As a result of the foregoing rules, and certain other special rules, the amounts of net investment income and net capital gains that the fund will be required to distribute to shareholders may be greater than such amounts would have been had the fund invested directly in the securities held by the underlying funds, rather than investing in shares of the underlying funds. For similar reasons, the amount or timing of distributions from the fund qualifying for treatment as being of a particular character (e.g., as long-term capital gain, exempt interest, eligible for dividends-received deduction, etc.) will not necessarily be the same as it would have been had the fund invested directly in the securities held by the underlying funds.

If the fund receives dividends from an underlying fund that qualifies as a regulated investment company, and the underlying fund reports such dividends as "qualified dividend income," then the fund may, in turn, report a portion of its distributions as "qualified dividend income" as well, provided the fund meets the holding period and other requirements with respect to shares of the underlying fund.

If the fund receives dividends from an underlying fund and the underlying fund reports such dividends as eligible for the dividends-received deduction, then the fund is permitted, in turn, to designate a portion of its distributions as eligible for the dividends-received deduction, provided the fund meets the holding period and other requirements with respect to shares of the underlying fund.

If the fund were to own 20% or more of the voting interests of an underlying fund, subject to a safe harbor in respect of certain fund of funds arrangements, the fund would be required to "look through" the underlying fund to its holdings and combine the appropriate percentage (as determined pursuant to the applicable Treasury Regulations) of the underlying fund's assets with the fund's assets for purposes of satisfying the 25% diversification test described above.

If, at the close of each quarter of the fund's taxable year, at least 50% of its total assets consists of interests in other regulated investment companies (such fund, a "qualified fund of funds"), the fund will be permitted to distribute exempt-interest dividends and thereby pass through to its shareholders the tax-exempt character of any exempt-interest dividends it receives from underlying funds in which it invests, or interest on any tax-exempt obligations in which it directly invests, if any. For further information regarding exempt-interest dividends, see "Exempt-interest dividends," above.

If the fund is a qualified fund of funds, the fund will be entitled to elect to pass through to its shareholders a credit or deduction for foreign taxes (if any) borne in respect of foreign securities income earned by the fund, or by any underlying funds and passed through to the fund. If the fund so elects, shareholders will include in gross income from foreign sources their pro rata shares of such taxes, if any, treated as paid by the fund. Even if the fund is eligible to make such an election for a given year, it may determine not to do so. If the fund elects to pass through to its shareholders foreign tax credits or deductions, tax-exempt shareholders and those who invest in the fund through tax-advantaged accounts such as IRAs will not benefit from any such tax credit or deduction. See "Foreign taxes" below for more information.

Derivatives, hedging and related transactions; certain exposure to commodities. In general, option premiums received by the fund are not immediately included in the income of the fund. Instead, the premiums are recognized when the option contract expires, the option is exercised by the holder, or the fund transfers or otherwise terminates the option (*e.g.*, through a closing transaction). If a call option written by the fund is exercised and the fund sells or delivers the underlying stock, the fund generally will recognize capital gain or loss equal to (a) the sum of the strike price and the option premium received by the fund minus (b) the fund's basis in the stock. Such gain or loss generally will be short-term or long-term depending upon the holding period of the underlying stock. If securities are purchased by the fund pursuant to the exercise of a put option written by it, the fund generally will subtract the premium received for purposes of computing its cost basis in the securities purchased. Gain or loss arising in respect of a termination of the fund's obligation under an option other than through the exercise of the option will be short-term gain or loss depending on whether the premium income received by the fund is greater or less than the amount paid by the fund (if any) in terminating the transaction. Thus, for example, if an option written by the fund expires unexercised, the fund generally will recognize short-term gain equal to the premium received.

Certain covered call writing activities of the fund may trigger the U.S. federal income tax straddle rules contained primarily in Section 1092 of the Code. Very generally, where applicable, Section 1092 requires (i) that losses be deferred on positions deemed to be offsetting positions with respect to "substantially similar or related property," to the extent of unrealized gain in the latter, and (ii) that the holding period of such a straddle position that has not already been held for the long-term holding period be terminated and begin anew once the position is no longer part of a straddle. Options on single stocks that are not "deep in the money" may constitute qualified covered calls, which generally are not subject to the straddle rules; the holding period on stock underlying qualified covered calls that are "in the money" although not "deep in the money" will be suspended during the period that such calls are outstanding. Thus, the straddle rules and the rules governing qualified covered calls could cause gains that would otherwise constitute long-term capital gains to be treated as short-term capital gains, and distributions that would otherwise constitute "qualified dividend income" or qualify for the dividends-received deduction to fail to satisfy the holding period requirements and therefore to be taxed as ordinary income or to fail to qualify for the dividends-received deduction, as the case may be.

In general, 40% of the gain or loss arising from the closing out of a futures contract traded on an exchange approved by the Commodities Futures Trading Commission is treated as short-term gain or loss, and 60% is treated as long-term gain or loss, although certain foreign currency gains and losses from such contracts may be treated as ordinary in character. Also, such contracts held by the fund at the end of each taxable year (and, for purposes of the 4% excise tax, on certain other dates as prescribed under the Code) are "marked to market" with the result that unrealized gains or losses are treated as though they were realized and the resulting gain or loss is treated as ordinary or 60/40 gain or loss, as applicable.

The fund's investment in swaps, if any, will generate ordinary income and losses for federal income tax purposes. The fund's investments in futures and swaps may cause the fund to recognize income without receiving cash with which to make the distributions necessary to qualify and be eligible for treatment as a regulated investment company and avoid a fund-level tax. The fund may therefore need to liquidate other investments, including when it is not advantageous to do so, to meet its

distribution requirement. The fund is not permitted to carry forward any net ordinary losses it realizes in a taxable year to offset ordinary income it realizes in subsequent taxable years.

In addition to the special rules described above in respect of options, futures transactions and swaps, the fund's derivative transactions, including transactions in options, futures contracts, straddles, securities loan and other similar transactions, including for hedging purposes, will be subject to special tax rules (including constructive sale, mark-to-market, straddle, wash sale, and short sale rules), the effect of which may be to accelerate income to the fund, defer losses to the fund, cause adjustments in the holding periods of the fund's securities, convert long-term capital gains into short-term capital gains, short-term capital losses into long-term capital losses, or capital gains into ordinary income. These rules could therefore affect the amount, timing and character of distributions to shareholders. The fund may make any applicable elections pertaining to such transactions consistent with the interests of the fund.

Because these and other tax rules applicable to these types of transactions are in some cases uncertain under current law, an adverse determination or future guidance by the IRS with respect to these rules (which determination or guidance could be retroactive) may affect whether the fund has made sufficient distributions, and otherwise satisfied the relevant requirements, to maintain its qualification as a regulated investment company and avoid a fund-level tax.

A fund's use of commodity-linked derivatives can be limited by the fund's intention to qualify as a regulated investment company and can bear on its ability to so qualify. Income and gains from certain commodity-linked derivatives do not constitute qualifying income to a regulated investment company for purposes of the 90% gross income test described above. The tax treatment of certain other commodity-linked derivative instruments in which the fund might invest is not certain, in particular with respect to whether income or gains from such instruments constitute qualifying income to a regulated investment company. If the fund were to treat income or gain from a particular instrument as qualifying income and the income or gain were later determined not to constitute qualifying income and, together with any other nonqualifying income, caused the fund's nonqualifying income to exceed 10% of its gross income in any taxable year, the fund would fail to qualify as a regulated investment company unless it is eligible to and does pay a tax at the fund level.

The tax rules are uncertain with respect to the treatment of income or gains arising in respect of commodity-linked exchange-traded notes ("ETNs") and certain commodity-linked structured notes; also, the timing and character of income or gains arising from ETNs can be uncertain. An adverse determination or future guidance by the IRS (which determination or guidance could be retroactive) may affect the fund's ability to qualify for treatment as a regulated investment company and to avoid a fund-level tax.

To the extent that, in order to achieve exposure to commodities, the fund invests in entities that are treated as pass-through vehicles for U.S. federal income tax purposes, including, for instance, certain ETFs (e.g., ETFs investing in gold bullion) and partnerships other than qualified publicly traded partnerships (as defined earlier), all or a portion of any income and gains from such entities could constitute non-qualifying income to the fund for purposes of the 90% gross income requirement described above. In such a case, the fund's investments in such entities could be limited by its intention to qualify as a regulated investment company and could bear on its ability to so qualify. Certain commodities-related ETFs may qualify as qualified publicly traded partnerships. In such cases, the net income derived from such investments will constitute qualifying income for purposes of the 90% gross income requirement. If, however, such a vehicle were to fail to qualify as a qualified publicly traded partnership in a particular year, a portion of the gross income derived from it in such year could constitute non-qualifying income to the fund for purposes of the 90% gross income requirement and thus could adversely affect the fund's ability to qualify as a regulated investment company for a particular year. In addition, the diversification requirement described above for regulated investment company qualification will limit the fund's investments in one or more vehicles that are qualified publicly traded partnerships to 25% of the fund's total assets as of the close of each quarter of the fund's taxable year.

Each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund intends to gain exposure to commodities and commodity-related investments, in whole or in part, through each fund's respective Subsidiary. A U.S. person who owns (directly, indirectly or constructively) 10 percent or more of the total combined voting power of all classes of stock of a foreign corporation is a "United States Shareholder" for purposes of the CFC provisions of the Code. A foreign corporation is a CFC if, on any day of its taxable year, more than 50 percent of the voting power or value of its stock is owned (directly, indirectly or constructively) by "United States Shareholders." Because each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund is a U.S. person that owns all of the stock of its respective Subsidiary, each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income

Fund is a "United States Shareholder" and each Subsidiary is a CFC. As a "United States Shareholder," each of Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund is required to include in gross income for United States federal income tax purposes, as ordinary income, all of its Subsidiary's "subpart F income," whether or not such income is distributed by the applicable Subsidiary, which may increase the ordinary income recognized by the fund. "Subpart F income" generally includes interest, original issue discount, dividends, net gains from the disposition of stocks or securities, receipts with respect to securities loans and net payments received with respect to equity swaps and similar derivatives. "Subpart F income" also includes net gains from transactions (including futures, forward and similar transactions) in commodities. It is expected that all of the Subsidiaries' income will be "subpart F income." Each fund's recognition of its Subsidiary's "subpart F income" will increase such fund's tax basis in its Subsidiary's shares. Distributions by a Subsidiary to the applicable fund will be tax-free, to the extent of such Subsidiary's previously undistributed "subpart F income," and will correspondingly reduce the fund's tax basis in its Subsidiary's shares. "Subpart F income" is generally treated as ordinary income, regardless of the character of a Subsidiary's underlying income. If a net loss is realized by a Subsidiary, such loss is generally not available to offset income or capital gain generated from the fund's other investments. In addition, a Subsidiary is not permitted to carry forward any net ordinary losses it realizes in a taxable year to offset ordinary income it realizes in subsequent taxable years. To the extent a fund recognizes "subpart F income" in excess of actual cash distributions from the Subsidiary, if any, it may be required to sell assets (including when it is not advantageous to do so) to generate the cash necessary to distribute as dividends to its shareholders all of its income and gains and therefore to eliminate any tax liability at the fund level.

Under Treasury regulations, "subpart F income," if any, included in the income of a fund as a result of an investment in a non-U.S. corporation treated as a CFC (such as a Subsidiary), will constitute qualifying income to the fund to the extent it is either (i) timely and currently repatriated or (ii) derived with respect to the fund's business of investing in stock, securities or currencies.

Certain of the fund's investments in derivative instruments and foreign currency-denominated instruments, and any of the fund's transactions in foreign currencies and hedging activities, are likely to produce a difference between its book income and its taxable income. If such a difference arises, and the fund's book income is less than its taxable income (or, for tax-exempt funds, the sum of its net tax-exempt and taxable income), the fund could be required to make distributions exceeding book income to qualify as a regulated investment company that is accorded special tax treatment and to eliminate fund-level income tax. In the alternative, if the fund's book income exceeds the sum of its taxable income and tax-exempt income, the distribution (if any) of such excess will be treated as (i) a dividend to the extent of the fund's remaining earnings and profits (including earnings and profits arising from tax-exempt income), (ii) thereafter as a return of capital to the extent of the recipient's basis in the shares, and (iii) thereafter as gain from the sale or exchange of a capital asset.

Investments in REITs. The fund's investment in REIT equity securities may result in the fund's receipt of cash in excess of the REIT's earnings. If the fund distributes such amounts, such distribution could constitute a return of capital to the fund shareholders for U.S. federal income tax purposes. Dividends received by the fund from a REIT generally will not constitute qualified dividend income and will not qualify for the corporate dividends-received deduction.

Distributions by the fund to its shareholders that the fund properly reports as "section 199A dividends," as defined and subject to certain conditions described below, are treated as qualified REIT dividends in the hands of non-corporate shareholders. Non-corporate shareholders are permitted a federal income tax deduction equal to 20% of qualified REIT dividends received by them, subject to certain limitations. Very generally, a "section 199A dividend" is any dividend or portion thereof that is attributable to certain dividends received by a regulated investment company from REITs, to the extent such dividends are properly reported as such by the regulated investment company in a written notice to its shareholders. A section 199A dividend is treated as a qualified REIT dividend only if the shareholder receiving such dividend holds the dividend-paying regulated investment company shares for at least 46 days of the 91-day period beginning 45 days before the shares become ex-dividend, and is not under an obligation to make related payments with respect to a position in substantially similar or related property. A fund is permitted to report such part of its dividends as section 199A dividends as are eligible, but is not required to do so.

Mortgage-related securities. The fund may invest in REITs, including REITs that hold residual interests in real estate mortgage investment conduits ("REMICs") (including by investing in residual interests in collateralized mortgage obligations ("CMOs") with respect to which an election to be treated as a REMIC is in effect), REITs that are themselves taxable mortgage pools ("TMPs") or REITs that invest in TMPs. Under a notice issued by the IRS in October 2006 and Treasury regulations that have not yet been issued, but apply retroactively, a portion of the fund's income from a REIT that is attributable to the REIT's residual interest in a REMIC or TMP (referred to in the Code as an "excess inclusion") will be subject to U.S. federal income tax in all events. This notice also provides, and the regulations are expected to provide, that excess inclusion income of a regulated investment

company, such as the fund, will be allocated to shareholders of the regulated investment company in proportion to the dividends received by such shareholders, with the same consequences as if the shareholders held the related REMIC or TMP residual interest directly. As a result, a fund investing in such interests may not be a suitable investment for charitable remainder trusts, as noted below.

In general, excess inclusion income allocated to shareholders (i) cannot be offset by net operating losses (subject to a limited exception for certain thrift institutions), (ii) will constitute unrelated business taxable income ("UBTI") to entities (including a qualified pension plan, an individual retirement account, a 401(k) plan, a Keogh plan or other tax-exempt entity) subject to tax on UBTI, thereby potentially requiring such an entity that is allocated excess inclusion income, and otherwise might not be required to file a tax return, to file a tax return and pay tax on such income, and (iii) in the case of a non-U.S. shareholder, will not qualify for any reduction in U.S. federal withholding tax. A shareholder will be subject to U.S. federal income tax on such inclusions notwithstanding any exemption from such income tax otherwise available under the Code. Any investment in residual interests of CMO that has elected to be treated as a REMIC can create complex tax problems, especially if the fund has state or local governments or other tax-exempt organizations as shareholders.

Income of a fund that would be UBTI if earned directly by a tax-exempt entity generally will not constitute UBTI when distributed to a tax-exempt shareholder of the fund. Notwithstanding the foregoing, a tax-exempt shareholder will recognize UBTI by virtue of its investment in the fund if shares in the fund constitute debt-financed property in the hands of the tax-exempt shareholder within the meaning of Code Section 514(b). Furthermore, a tax-exempt shareholder may recognize UBTI if the fund recognizes excess inclusion income derived from direct or indirect investments in REMIC residual interests or TMPs if the amount of such income recognized by the fund exceeds the fund's investment company taxable income (after taking into account deductions for dividends paid by the fund).

Under legislation enacted in December 2006, a charitable remainder trust ("CRT"), as defined in Section 664 of the Code, that realizes UBTI for a taxable year must pay an excise tax annually of an amount equal to such UBTI. Under IRS guidance issued in October 2006, a CRT will not recognize UBTI solely as a result of investing in a fund that recognizes excess inclusion income. Rather, if at any time during any taxable year a CRT (or one of certain other tax-exempt shareholders, such as the United States, a state or political subdivision, or an agency or instrumentality thereof, and certain energy cooperatives) is a record holder of a share in a fund that recognizes excess inclusion income, then the fund will be subject to a tax on that portion of its excess inclusion income for the taxable year that is allocable to such shareholders at the highest federal corporate income tax rate. The extent to which this IRS guidance remains applicable in light of the December 2006 legislation is unclear. To the extent permitted under the 1940 Act, the fund may elect to specially allocate any such tax to the applicable CRT, or other shareholder, and thus reduce such shareholder's distributions for the year by the amount of the tax that relates to such shareholder's interest in the fund. CRTs and other tax-exempt investors are urged to consult their tax advisors concerning the consequences of investing in the fund.

Return of capital distributions. If the fund makes a distribution in and with respect to any taxable year to a shareholder in excess of the fund's current and accumulated earnings and profits, the excess distribution will be treated as a return of capital to the extent of such shareholder's tax basis in its shares, and thereafter as capital gain. A return of capital is not taxable, but it reduces a shareholder's tax basis in its shares, thus reducing any loss or increasing any gain on a subsequent taxable disposition by the shareholder of its shares. Dividends and distributions on the fund's shares generally are subject to federal income tax as described herein to the extent they do not exceed the fund's realized income and gains, even though such dividends and distributions may economically represent a return of a particular shareholder's investment. Such distributions are likely to occur in respect of shares purchased at a time when the fund's net asset value reflects gains that are either unrealized, or realized but not distributed. Such realized income and gains may be required to be distributed even when the fund's net asset value also reflects unrealized losses. Distributions are taxable to a shareholder even if they are paid from income or gains earned by the fund prior to the shareholder's investment (and thus included in the price paid by the shareholder).

Securities issued or purchased at a discount. Some debt obligations with a fixed maturity date of more than one year from the date of issuance (and zero-coupon debt obligations with a fixed maturity date of more than one year from the date of issuance) that are acquired by the fund will be treated as debt obligations that are issued originally at a discount. Generally, the amount of the original issue discount ("OID") is treated as interest income and is included in the fund's income (and required to be distributed by the fund) over the term of the debt security, even though payment of that amount is not received until a later time, upon partial or full repayment or disposition of the debt security. In addition, payment-in-kind securities will give rise to income which is required to be distributed and is taxable even though the fund holding the security receives no interest payment in cash on the security during the year.

Some debt obligations with a fixed maturity date of more than one year from the date of issuance that are acquired by the fund in the secondary market may be treated as having "market discount." Very generally, market discount is the excess of the stated redemption price of a debt obligation (or in the case of an obligation issued with OID, its "revised issue price") over the purchase price of such obligation. Generally any gain recognized on the disposition of, and any partial payment of principal on, a debt security having market discount is treated as ordinary income to the extent the gain, or principal payment, does not exceed the "accrued market discount" on such debt security. Alternatively, the fund may elect to accrue market discount currently, in which case the fund will be required to include the accrued market discount in the fund's income (as ordinary income) and thus distribute it over the term of the debt security, even though payment of that amount is not received until a later time, upon partial or full repayment or disposition of the debt security. The rate at which the market discount accrues, and thus is included in the fund's income, will depend upon which of the permitted accrual methods the fund elects.

Some debt obligations with a fixed maturity date of one year or less from the date of issuance that are acquired by the fund may be treated as having "acquisition discount" (very generally, the excess of the stated redemption price over the purchase price) or OID. The fund will be required to include the acquisition discount or OID in income over the term of the debt security, even though payment of that amount is not received until a later time, usually when the debt security matures. The fund may make one or more of the elections applicable to debt obligations having acquisition discount or OID, which could affect the character and timing of recognition of income.

If the fund holds the foregoing kinds of obligations, or other obligations subject to special rules under the Code, it may be required to pay out as an income distribution each year an amount which is greater than the total amount of cash interest the fund actually received. Such distributions may be made from the cash assets of the fund or, if necessary, by disposition of portfolio securities including at a time when it may not be advantageous to do so. These dispositions may cause the fund to realize higher amounts of short-term capital gains (generally taxed to shareholders at ordinary income tax rates) and, in the event the fund realizes net capital gains from such transactions, its shareholders may receive a larger capital gain distribution than if the fund had not held such obligations.

Securities purchased at a premium. Very generally, where the fund purchases a bond at a price that exceeds the redemption price at maturity (*i.e.*, a premium), the premium is amortizable over the remaining term of the bond. In the case of a taxable bond, if the fund makes an election applicable to all such bonds it purchases, which election is irrevocable without consent of the IRS, the fund reduces the current taxable income from the bond by the amortized premium and reduces its tax basis in the bond by the amount of such offset; upon the disposition or maturity of such bonds acquired on or after January 4, 2013, the fund is permitted to deduct any remaining premium allocable to a prior period. In the case of a tax-exempt bond, tax rules require the fund to reduce its tax basis by the amount of amortized premium.

Higher-Risk obligations. The fund may invest to a significant extent in debt obligations that are in the lowest rating categories or are unrated, including debt obligations of issuers not currently paying interest or who are in default. Investments in debt obligations that are at risk of or in default present special tax issues for the fund. Tax rules are not entirely clear about issues such as whether the fund should recognize market discount on a debt obligation and, if so, the amount of market discount the fund should recognize; when the fund may cease to accrue interest, OID or market discount, when and to what extent deductions may be taken for bad debts or worthless securities and how payments received on obligations in default should be allocated between principal and income. These and other related issues will be addressed by the fund when, as and if it invests in such obligations, in order to seek to ensure that it distributes sufficient income to preserve its status as a regulated investment company and does not become subject to U.S. federal income or excise tax.

Capital loss carryforward. Distributions from capital gains generally are made after applying any available capital loss carryforwards. Capital loss carryforwards are reduced to the extent they offset current-year net realized capital gains, whether the fund retains or distributes such gains. If a fund incurs or has incurred capital losses in excess of capital gains ("net capital losses"), those losses will be carried forward to one or more subsequent taxable years; any such carryforward losses will retain their character as short-term or long-term.

Foreign taxes. If more than 50% of the fund's assets at taxable year end consists of the securities of foreign corporations, the fund may elect to permit shareholders to claim a credit or deduction on their income tax returns for their pro rata portion of qualified taxes paid by the fund to foreign countries in respect of foreign securities the fund has held for at least the minimum period specified in the Code. A qualified fund of funds also may elect to pass through to its shareholders foreign taxes it has paid or foreign taxes passed through to it by any underlying fund that itself elected to pass through such taxes to shareholders (see "Funds of funds" above). In such a case, shareholders will include in gross income from foreign sources their pro rata shares of

such taxes. A shareholder's ability to claim a foreign tax credit or deduction in respect of foreign taxes paid by the fund may be subject to certain limitations imposed by the Code, as a result of which a shareholder may not get a full credit or deduction for the amount of such taxes. In particular, shareholders must hold their fund shares (without protection from risk of loss) on the ex-dividend date and for at least 15 additional days during the 30-day period surrounding the ex-dividend date to be eligible to claim a foreign tax credit with respect to a given dividend. Shareholders who do not itemize on their U.S. federal income tax returns may claim a credit (but no deduction) for such foreign taxes. Even if the fund is eligible to make such an election for a given year, it may determine not to do so. However, even if the fund elects to pass through to its shareholders foreign tax credits or deductions, tax-exempt shareholders and those who invest in the fund through tax-advantaged accounts such as IRAs will not benefit from any such tax credit or deduction.

Passive foreign investment companies. Investments treated as equity for federal income tax purposes in certain "passive foreign investment companies" ("PFICs", as defined below) could subject the fund to a U.S. federal income tax (including interest charges) on distributions received from the company or on the proceeds from the disposition of its investment in such a company. This tax cannot be eliminated by making distributions to fund shareholders; however, this tax can be avoided by making an election to mark such investments to market annually or to treat the passive foreign investment company as a "qualified electing fund." The QEF and mark-to-market elections may have the effect of accelerating the recognition of income (without the receipt of cash) and increasing the amount required to be distributed by the fund to avoid taxation. Making either of these elections therefore may require the fund to liquidate other investments to meet its distribution requirement, which may also accelerate the recognition of gain and affect the fund's total return. Dividends paid by PFICs will not be eligible to be treated as "qualified dividend income." If the fund indirectly invests in PFICs by virtue of the fund's investments in other funds, it may not make such PFIC elections; rather, the underlying funds directly investing in the PFICs would decide whether to make such elections.

Because it is not always possible to identify a foreign corporation as a PFIC, the fund may incur the tax and interest charges described above in some instances.

A PFIC is any foreign corporation: (i) 75 percent or more of the income of which for the taxable year is passive income, or (ii) the average percentage of the assets of which (generally by value, but by adjusted tax basis in certain cases) that produce or are held for the production of passive income is at least 50 percent. Generally, passive income for this purpose means dividends, interest (including income equivalent to interest), royalties, rents, annuities, the excess of gains over losses from certain property transactions and commodities transactions, and foreign currency gains. Passive income for this purpose does not include rents and royalties received by the foreign corporation from active business and certain income received from related persons.

Foreign currency-denominated transactions and related hedging transactions. The fund's transactions in foreign currencies, foreign currency-denominated debt obligations and certain foreign currency options, futures contracts and forward contracts (and similar instruments) may give rise to ordinary income or loss to the extent such income or loss results from fluctuations in the value of the foreign currency concerned. Any such net gains could require a larger dividend toward the end of the calendar year. Any such net losses generally will reduce and potentially require the recharacterization of prior ordinary income distributions. Such ordinary income treatment may accelerate fund distributions to shareholders and increase the distributions taxed to shareholders as ordinary income. Any net ordinary losses so created cannot be carried forward by the fund to offset income or gains earned in subsequent taxable years.

Sale, exchange or redemption of shares. The sale, exchange or redemption of fund shares may give rise to a gain or loss, but it is not expected that any gain or loss will be realized in respect of shares of Putnam Money Market Fund or Putnam Government Money Market Fund because of each such fund's policy to maintain its net asset value at a constant $1.00 per share. In general, any gain or loss realized upon a taxable disposition of shares will be treated as long-term capital gain or loss if the shares have been held for more than 12 months. Otherwise the gain or loss on the sale, exchange or redemption of fund shares will be treated as short-term capital gain or loss. However, if a shareholder sells shares at a loss within six months of purchase, any loss generally will be disallowed for federal income tax purposes to the extent of any exempt-interest dividends received on such shares. This loss disallowance, however, does not apply with respect to redemptions of fund shares held for six months or less with respect to a regular exempt-interest dividend paid by the fund if such fund declares substantially all of its net tax-exempt income as exempt-interest dividends on a daily basis, and pays such dividends at least on a monthly basis. In addition, any loss (not already disallowed as provided in the preceding sentences) realized upon a taxable disposition of shares held for six months or less will be treated as long-term, rather than short-term, to the extent of any Capital Gain Dividends received (or deemed received) by the shareholder with respect to the shares. Subject to the discussion below regarding money market funds, all or a portion of any loss realized upon a taxable disposition of fund shares will be disallowed if other shares of

the same fund are purchased within 30 days before or after the disposition. In such a case, the basis of the newly purchased shares will be adjusted to reflect the disallowed loss.

The IRS has issued regulations that permit a simplified method of accounting for gains and losses realized upon the disposition of shares of a money market fund. Very generally, rather than realizing gain or loss upon each redemption of a share, a shareholder using such method of accounting will recognize gain or loss with respect to the Putnam Money Market Fund's and Putnam Government Money Market Fund's shares for a given computation period (the shareholder's taxable year or shorter period selected by the shareholder) equal to the value of all of such fund's shares held by the shareholder on the last day of the computation period, less the value of all of such fund's shares held by the shareholder on the last day of the preceding computation period, less the shareholder's net investment in such fund (generally, purchases minus redemptions) made during the computation period. Additionally, the IRS has issued guidance providing that any loss realized on a sale of shares of the Putnam Money Market Fund or Putnam Government Money Market Fund will not be disallowed under the "wash sale" rules to the extent each such fund qualifies as a "money market fund" under the 1940 Act.

Cost basis reporting. Upon the redemption or exchange of a shareholder's shares in the fund, the fund, or, if such shareholder's shares are then held through a financial intermediary, the financial intermediary, will be required to provide the shareholder and the IRS with cost basis and certain other related tax information about the fund shares the shareholder redeemed or exchanged. This cost basis reporting requirement is effective for shares purchased, including through dividend reinvestment, on or after January 1, 2012. Shareholders can visit www.putnam.com/costbasis, or call the fund at 1-800-225-1581, or consult their financial representatives, as appropriate, for more information regarding available methods for cost basis reporting and how to select a particular method. Shareholders should consult their tax advisors to determine which available cost basis method is best for them.

Shares purchased through tax-qualified plans. Special tax rules apply to investments through employer-sponsored retirement plans and other tax-qualified plans or tax-advantaged arrangements. Shareholders should consult their tax advisors to determine the suitability of shares of the fund as an investment through such plans and arrangements and the precise effect of an investment on their particular tax situation.

Backup withholding. The fund generally is required to withhold and remit to the U.S. Treasury a percentage of the taxable dividends and other distributions paid to any individual shareholder who fails to furnish the fund with a correct taxpayer identification number (TIN), who has under-reported dividends or interest income, or who fails to certify to the fund that he or she is not subject to such withholding. The backup withholding rules may also apply to distributions that are properly reported as exempt-interest dividends. Backup withholding is not an additional tax. Any amounts withheld may be credited against the shareholder's U.S. federal income tax liability, provided the appropriate information is furnished to the IRS.

In order for a foreign investor to qualify for exemption from the backup withholding tax rates and for reduced withholding tax rates under income tax treaties, the foreign investor must comply with special certification and filing requirements. Foreign investors in a fund should consult their tax advisors in this regard.

Tax shelter reporting regulations. Under U.S. Treasury regulations, if a shareholder recognizes a loss on disposition of fund shares of at least $2 million in any single taxable year or $4 million in any combination of taxable years for an individual shareholder or $10 million in any single taxable year or $20 million in any combination of taxable years for a corporate shareholder, the shareholder must file with the IRS a disclosure statement on Form 8886. Direct shareholders of portfolio securities are in many cases excepted from this reporting requirement, but under current guidance, shareholders of a regulated investment company are not excepted. Future guidance may extend the current exception from this reporting requirement to shareholders of most or all regulated investment companies. The fact that a loss is reportable under these regulations does not affect the legal determination of whether the taxpayer's treatment of the loss is proper. Shareholders should consult their tax advisers to determine the applicability of these regulations in light of their individual circumstances.

Non-U.S. shareholders. Distributions by the fund to shareholders that are not "U.S. persons" within the meaning of the Code ("foreign shareholders") properly reported by the fund as (1) Capital Gain Dividends, (2) interest-related dividends, (3) short-term capital gain dividends, each as defined below and subject to certain conditions described below, and (4) exempt-interest dividends generally are not subject to withholding of U.S. federal income tax.

In general, the Code defines (1) "short-term capital gain dividends" as distributions of net short-term capital gains in excess of net long-term capital losses and (2) "interest-related dividends" as distributions from U.S. source interest income of types similar to

those not subject to U.S. federal income tax if earned directly by an individual foreign shareholder, in each case to the extent such distributions are properly reported as such by the fund in a written notice to shareholders. The exceptions to withholding for Capital Gain Dividends and short-term capital gain dividends do not apply to (A) distributions to an individual foreign shareholder who is present in the United States for a period or periods aggregating 183 days or more during the year of the distribution and (B) distributions attributable to gain that is treated as effectively connected with the conduct by the foreign shareholder of a trade or business within the United States under special rules regarding the disposition of U.S. real property interests as described below. The exception to withholding for interest-related dividends does not apply to distributions to a foreign shareholder (A) that has not provided a satisfactory statement that the beneficial owner is not a U.S. person, (B) to the extent that the dividend is attributable to certain interest on an obligation if the foreign shareholder is the issuer or is a 10% shareholder of the issuer, (C) that is within certain foreign countries that have inadequate information exchange with the United States, or (D) to the extent the dividend is attributable to interest paid by a person that is a related person of the foreign shareholder and the foreign shareholder is a controlled foreign corporation. If the fund invests in other regulated investment companies that pay Capital Gain Dividends, short-term capital gain dividends or interest-related dividends to the fund, such distributions retain their character as not subject to withholding if properly reported when paid by the fund to foreign shareholders. The fund is permitted to report such part of its dividends as interest-related and/or short-term capital gain dividends as are eligible, but is not required to do so. In the case of shares held through an intermediary, the intermediary may withhold even if the fund reports all or a portion of a payment as an interest-related or short-term capital gain dividend to shareholders.

The fact that a fund achieves its goals by investing in underlying funds generally does not adversely affect the fund's ability to pass on to foreign shareholders the full benefit of the interest-related dividends and short-term capital gain dividends that it receives from its investments in underlying funds, except possibly to the extent that (1) interest-related dividends received by the fund are offset by deductions allocable to the fund's qualified interest income or (2) short-term capital gain dividends received by the fund are offset by the fund's net short- or long-term capital losses, in which case the amount of a distribution from the fund to a foreign shareholder that is properly reported as either an interest-related dividend or a short-term capital gain dividend, respectively, may be less than the amount that such shareholder would have received had they invested directly in the underlying funds.

Distributions by the fund to foreign shareholders other than Capital Gain Dividends, interest-related dividends, and short-term capital gain dividends and exempt-interest dividends (*e.g.*, dividends attributable to dividend and foreign-source interest income or to short-term capital gains or U.S.-source interest income to which the exception from withholding described above does not apply) are generally subject to withholding of U.S. federal income tax at a rate of 30% (or lower applicable treaty rate).

Under U.S. federal tax law, a beneficial holder of shares who is a foreign shareholder is not, in general, subject to U.S. federal income tax on gains (and is not allowed a deduction for losses) realized on the sale of shares of the fund, unless (i) such gain is effectively connected with the conduct of a trade or business carried on by such holder within the United States; (ii) in the case of an individual holder, the holder is present in the United States for a period or periods aggregating 183 days or more during the year of the sale and certain other conditions are met; or (iii) the special rules relating to gain attributable to the sale or exchange of "U.S. real property interests" ("USRPIs") apply to the foreign shareholder's sale of shares of the fund (as described below).

If a beneficial holder who is a foreign shareholder has a trade or business in the United States, and the dividends are effectively connected with the conduct by the beneficial holder of a trade or business in the United States, the dividend will be subject to U.S. federal net income taxation at regular income tax rates and, in the case of a foreign corporation, may also be subject to a branch profits tax. If a foreign shareholder is eligible for the benefits of a tax treaty, any effectively connected income or gain will generally be subject to U.S. federal income tax on a net basis only if it is also attributable to a permanent establishment maintained by the shareholder in the United States. More generally, foreign shareholders who are residents in a country with an income tax treaty with the United States may obtain different tax results than those described herein, and are urged to consult their tax advisors.

Special rules would apply if the fund were a qualified investment entity ("QIE") because it is either a "U.S. real property holding corporation" ("USRPHC") or would be a USRPHC but for the operation of certain exceptions to the definition of USRPIs described below. Very generally, a USRPHC is a domestic corporation that holds USRPIs the fair market value of which equals or exceeds 50% of the sum of the fair market values of the corporation's USRPIs, interests in real property located outside the United States, and other trade or business assets. USRPIs generally are defined as any interest in U.S. real property and any interest (other than solely as a creditor) in a USRPHC or, very generally, an entity that has been a USRPHC in the last five years. A fund that holds, directly or indirectly, significant interests in REITs may be a USRPHC. Interests in domestically controlled QIEs, including regulated investment companies and REITs that are QIEs, not-greater-than-10% interests in publicly

traded classes of stock in REITs and not-greater-than-5% interests in publicly traded classes of stock in regulated investment companies generally are not USRPIs, but these exceptions do not apply for purposes of determining whether a fund is a QIE.

If an interest in the fund were a USRPI, the fund would be required to withhold U.S. tax on the proceeds of a share redemption by a greater-than-5% foreign shareholder, in which case such foreign shareholder generally would also be required to file U.S. tax returns and pay any additional taxes due in connection with the redemption.

If the fund were a QIE under a special "look-through" rule, any distributions by the fund to a foreign shareholder (including, in certain cases, distributions made by the fund in redemption of its shares) attributable directly or indirectly to (i) distributions received by the fund from a lower-tier regulated investment company or REIT that the fund is required to treat as USRPI gain in its hands and (ii) gains realized on the disposition of USRPIs by the fund would retain their character as gains realized from USRPIs in the hands of the fund's foreign shareholders and would be subject to U.S. tax withholding. In addition, such distributions could result in the foreign shareholder being required to file a U.S. tax return and pay tax on the distributions at regular U.S. federal income tax rates. The consequences to a foreign shareholder, including the rate of such withholding and character of such distributions (*e.g.*, as ordinary income or USRPI gain), would vary depending upon the extent of the foreign shareholder's current and past ownership of the fund.

Foreign shareholders of the fund also may be subject to "wash sale" rules to prevent the avoidance of the tax-filing and -payment obligations discussed above through the sale and repurchase of fund shares.

Foreign shareholders should consult their tax advisers and, if holding shares through intermediaries, their intermediaries, concerning the application of these rules to their investment in the fund.

Other reporting and withholding requirements. Sections 1471-1474 of the Code and the U.S. Treasury and IRS guidance issued thereunder (collectively, "FATCA") generally require a fund to obtain information sufficient to identify the status of each of its shareholders under FATCA or under an applicable intergovernmental agreement (an "IGA") between the United States and a foreign government. If a shareholder fails to provide the requested information or otherwise fails to comply with FATCA or an IGA, the fund may be required to withhold under FATCA at a rate of 30% with respect to that shareholder on ordinary dividends it pays. The IRS and the Department of Treasury have issued proposed regulations providing that these withholding rules will not be applicable to the gross proceeds of share redemptions or Capital Gain Dividends the fund pays. If a payment by the fund is subject to FATCA withholding, the fund is required to withhold even if such payment would otherwise be exempt from withholding under the rules applicable to foreign shareholders described above (*e.g.*, short-term capital gain dividends and interest-related dividends).

Each prospective investor is urged to consult its tax advisor regarding the applicability of FATCA and any other reporting requirements with respect to the prospective investor's own situation, including investments through an intermediary.

General Considerations. The U.S. federal income tax discussion set forth above is for general information only. Prospective investors should consult their tax advisers regarding the specific federal tax consequences of purchasing, holding, and disposing of shares of the fund, as well as the effects of state, local and foreign tax law and any proposed tax law changes.

MANAGEMENT

Trustees

Name, Address[1], Year of Birth, Position(s) Held with Fund and Length of Service as a Fund Trustee[2]	Principal Occupation(s) During Past 5 Years	Number of Funds in the Franklin Templeton Funds Complex Overseen by Trustee[3]	Other Directorships Held by Trustee
Liaquat Ahamed (Born 1952), Trustee since 2012	Author; won Pulitzer Prize for *Lords of Finance: The Bankers Who Broke the World.*	102	Chair of the Sun Valley Writers Conference, a literary not-for-profit organization; and a Trustee of the

Name, Address[1], Year of Birth, Position(s) Held with Fund and Length of Service as a Fund Trustee[2]	Principal Occupation(s) During Past 5 Years	Number of Funds in the Franklin Templeton Funds Complex Overseen by Trustee[3]	Other Directorships Held by Trustee
			Journal of Philosophy.
Barbara M. Baumann (Born 1955), Trustee since 2010, Vice Chair from 2022 to 2024, Chair since 2024	President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.	102	Director of Devon Energy Corporation, a publicly traded independent natural gas and oil exploration and production company; Director of National Fuel Gas Company, a publicly traded energy company that engages in the production, gathering, transportation, distribution and marketing of natural gas; Senior Advisor to the energy private equity firm First Reserve; member of the Finance Committee of the Children's Hospital of Colorado; member of the Investment Committee of the Board of The Denver Foundation; and previously a Director of publicly traded companies Buckeye Partners LP, UNS Energy Corporation, CVR Energy Company, and SM Energy Corporation.
Katinka Domotorffy (Born 1975), Trustee since 2012	Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies.	102	Director of the Great Lakes Science Center and of College Now Greater Cleveland.
Catharine Bond Hill (Born 1954), Trustee since 2017	Managing Director of Ithaka S+R, a not-for-profit service that helps the academic community navigate economic and technological change. From 2006 to 2016, Dr. Hill served as the 10th president of Vassar College.	102	Director of Yale-NUS College; and Trustee of Yale University.
Gregory G. McGreevey (Born 1962), Trustee since 2024	Until 2023, Senior Managing Director, Investments, Invesco Ltd., a global investment firm.	102	Previously, a Director of Invesco Mortgage Capital, Inc., a publicly traded real estate investment trust.
***Jennifer Williams Murphy** (Born 1964), Trustee since 2022	Chief Executive Officer and Founder of Runa Digital Assets, LLC, an institutional investment advisory firm specializing in active management of digital assets. Until 2021, Chief Operating Officer of Western Asset Management, LLC, a global investment adviser, and Chief Executive Officer and President of Western Asset Mortgage Capital Corporation, a	102	Previously, a Director of Western Asset Mortgage Capital Corporation.

Name, Address[1], Year of Birth, Position(s) Held with Fund and Length of Service as a Fund Trustee[2]	Principal Occupation(s) During Past 5 Years	Number of Funds in the Franklin Templeton Funds Complex Overseen by Trustee[3]	Other Directorships Held by Trustee
	mortgage finance real estate investment trust.		
Marie Pillai (Born 1954), Trustee since 2022	Senior Advisor, Hunter Street Partners, LP, an asset-oriented private investment firm; Director of Choice Bank, a private, community bank based in North Dakota. Until 2019, Vice President, Chief Investment Officer and Treasurer of General Mills, Inc., a global food company.	102	Member of the Investment Committee of the Bush Foundation, a nonprofit organization supporting community problem-solving in Minnesota, North Dakota and South Dakota; Member of the Finance Council and Corporate Board of the Archdiocese of Saint Paul and Minneapolis; Member of the Curriculum Committee of the Center for Board Certified Fiduciaries, a public benefit corporation providing coursework for developing fiduciaries; previously a Board Member of Catholic Charities of St. Paul and Minneapolis; former Director of the Catholic Community Foundation of Minnesota; and former Investment Advisory Board Member of the University of Minnesota.
George Putnam III (Born 1951), Trustee since 1984	Chair of New Generation Research, Inc., a publisher of financial advisory and other research services, and President of New Generation Advisors, LLC, a registered investment adviser to private funds.	102	Director of The Boston Family Office, LLC, a registered investment adviser; a Director of the Gloucester Marine Genomics Institute; a Trustee of the Lowell Observatory Foundation; and previously a Trustee of the Marine Biological Laboratory.
Manoj P. Singh (Born 1952), Trustee since 2017	Until 2015, Chief Operating Officer and Global Managing Director at Deloitte Touche Tohmatsu, Ltd., a global professional services organization, serving on the Deloitte U.S. Board of Directors and the boards of Deloitte member firms in China, Mexico and Southeast Asia.	102	Director of ReNew Energy Global Plc, a publicly traded renewable energy company; Director of Abt Associates, a global research firm working in the fields of health, social and environmental policy, and international development; Trustee of Carnegie Mellon University; Director of Pratham USA, an organization dedicated to children's education in India; member of the advisory board of Altimetrik, a business transformation and technology solutions firm; and Director of DXC Technology, a global IT services and consulting company.
Mona K. Sutphen (Born 1967), Trustee since 2020	Partner, Investment Strategies at The Vistria Group, a private investment firm focused on middle-market companies in the	102	Director of Spotify Technology S.A., a publicly traded audio content streaming service; Director of Unitek Learning, a private nursing and medical services

Name, Address[1], Year of Birth, Position(s) Held with Fund and Length of Service as a Fund Trustee[2]	Principal Occupation(s) During Past 5 Years	Number of Funds in the Franklin Templeton Funds Complex Overseen by Trustee[3]	Other Directorships Held by Trustee
	healthcare, education, and financial services industries. From 2014 to 2018, Partner at Macro Advisory Partners, a global consulting firm.		education provider in the United States; Board Member, International Rescue Committee; Co-Chair of the Board of Human Rights First; Trustee of Mount Holyoke College; member of the Advisory Board for the Center on Global Energy Policy at Columbia University's School of International and Public Affairs; previously Director of Pattern Energy and Pioneer Natural Resources, publicly traded energy companies; and previously Managing Director of UBS AG.
Interested Trustees			
****Robert L. Reynolds** (Born 1952), Trustee since 2008	Chair of Great-West Lifeco U.S. LLC. Prior to 2019, also President and Chief Executive Officer of Great-West Financial, a financial services company that provides retirement savings plans, life insurance, and annuity and executive benefits products, and of Great-West Lifeco U.S. LLC, a holding company that owns Putnam Investments, LLC and Great-West Financial, and a member of Great-West Financial's Board of Directors. Until 2023, President and Chief Executive Officer of Putnam Investments, LLC, President and Chief Executive Officer of Putnam Management, and member of Putnam Investments' Board of Directors.	102	Director of the Concord Museum; Director of Dana-Farber Cancer Institute; Director of the U.S. Ski & Snowboard Foundation; Chair of the Boston Advisory Board of the American Ireland Fund; Council Co-Chair of the American Enterprise Institute; Member of U.S. Chamber of Commerce, Center for Capital Markets Competitiveness; Chair of Massachusetts High Technology Council; Member of the Chief Executives Club of Boston; Member of the Massachusetts General Hospital President's Council; Chairman of the Board of Directors of the Ron Burton Training Village; Director and former Chair of the Massachusetts Competitive Partnership; former Chair of the West Virginia University Foundation; and former Executive Committee Member of the Greater Boston Chamber of Commerce.
*** **Jane E. Trust** (Born 1962), Trustee since 2024	Since 2020, Senior Vice President, Fund Board Management, Franklin Templeton. Since 2015, Officer and/or Trustee/Director of 123 funds associated with Franklin Templeton Fund Advisor, LLC ("FTFA") or its affiliates, and President and Chief Executive Officer of FTFA. From 2018 to 2020, Senior Managing Director of Legg Mason & Co., LLC ("Legg	225	None.

Name, Address[1], Year of Birth, Position(s) Held with Fund and Length of Service as a Fund Trustee[2]	Principal Occupation(s) During Past 5 Years	Number of Funds in the Franklin Templeton Funds Complex Overseen by Trustee[3]	Other Directorships Held by Trustee
	Mason & Co."). From 2016 to 2018, Managing Director of Legg Mason & Co. In 2015, Senior Vice President of FTFA.		

[1] The address of each Trustee is 100 Federal Street, Boston, MA 02110.

[2] Each Trustee serves for an indefinite term, until his or her resignation, retirement during the year he or she reaches age 75, death or removal.

[3] The Franklin Templeton funds complex is composed of the registered investment companies advised by the Investment Manager or by its affiliates.

* Ms. Murphy is the founder, controlling member, and Chief Executive Officer of Runa Digital Assets, LLC ("RDA"), the investment manager of Runa Digital Partners, LP ("RDP"), a private investment fund. Ms. Murphy also holds a controlling interest in RDP's general partner and is a limited partner in RDP. A subsidiary of Franklin Resources, Inc. ("Franklin Templeton") and certain individuals employed by Franklin Templeton or its affiliates have made passive investments as limited partners in RDP (one of whom serves on the advisory board for RDA, which has no governance or oversight authority over RDA), representing in the aggregate approximately 38% of RDP as of April 30, 2025. In addition, if certain conditions are met, Franklin Templeton will be entitled to receive a portion of any incentive compensation allocable to RDP's general partner. For so long as Franklin Templeton maintains its investment in RDP, Ms. Murphy also has agreed upon request to advise and consult with Franklin Templeton and its affiliates on the market for digital assets. Ms. Murphy provides similar service to other limited partners in RDP that request her advice. With regard to Ms. Murphy, the relationships described above may give rise to a potential conflict of interest with respect to the funds.

** Trustee who is an "interested person" (as defined in the 1940 Act) of the fund and the Investment Manager. Mr. Reynolds is deemed an "interested person" by virtue of his position as an officer of the fund and his direct beneficial interest in shares of Franklin Templeton, of which the Investment Manager is an indirect wholly-owned subsidiary. Mr. Reynolds is the President of your fund and each of the other Putnam funds, and prior to January 1, 2024, Mr. Reynolds was President and Chief Executive Officer of Putnam Management and Putnam Investments, LLC ("Putnam Investments"), the previous parent company to Putnam Management and PAC.

*** Trustee who is an "interested person" (as defined in the 1940 Act) of the fund and the Investment Manager. Ms. Trust is deemed an "interested person" by virtue of her positions with certain affiliates of the Investment Manager.

Trustee Qualifications

Each of the fund's Trustees, with the exception of Ms. Trust and Mr. McGreevey, was most recently elected by shareholders of the fund during 2022, although most of the Trustees have served on the Board for many years. The Board Policy and Nominating Committee is responsible for recommending proposed nominees for election to the full Board of Trustees for its approval. As part of its deliberative process, the Committee considers the experience, qualifications, skills and attributes, including diversity of background, experience, and views, that it determines would most benefit the funds overseen by the Board of Trustees at the time. In recommending the election of the board members as Trustees, the Committee generally considered the educational, business and professional experience of each Trustee in determining his or her qualifications to serve as a Trustee of the fund, including the Trustee's record of service as a director or trustee of public and private organizations. (This included, but was not limited to, consideration of the specific experience noted in the preceding table.) In the case of most members of the Board, the Committee considered his or her previous service as a member of the Board of Trustees, which demonstrated a high level of

diligence and commitment to the interests of fund shareholders and an ability to work effectively and collegially with other members of the Board.

The Committee also considered, among other factors, the particular attributes described below with respect to the various individual Trustees and considered the attributes as indicative of the person's ability to deal effectively with the types of financial, regulatory, and/or investment matters that typically arise in the course of a Trustee's work:

Independent Trustees

Liaquat Ahamed -- Mr. Ahamed's experience as Chief Executive Officer of a major investment management organization and as head of the investment division at the World Bank, as well as his experience as an author of economic literature.

Barbara M. Baumann -- Ms. Baumann's experience in the energy industry as a consultant, an investor, and in both financial and operational management positions at a global energy company, and her service as a director of multiple NYSE companies.

Katinka Domotorffy -- Ms. Domotorffy's experience as Chief Investment Officer and Global Head of Quantitative Investment Strategies at a major asset management organization.

Catharine Bond Hill -- Dr. Hill's education and experience as an economist and as president and provost of colleges in the United States.

Gregory G. McGreevey -- Mr. McGreevey's experience as a Senior Managing Director of a global investment firm and as a director of a publicly traded real estate investment trust.

Jennifer Williams Murphy -- Ms. Murphy's experience as Chief Operating Officer of a major global investment management organization and as Chief Executive Officer of an investment advisory firm specializing in digital assets.

Marie Pillai -- Ms. Pillai's experience as Vice President, Chief Investment Officer, and Treasurer of a global food company, her experience in similar positions at a global engineering company, and her experience in corporate and operational finance roles at a global consumer products company.

George Putnam III -- Mr. Putnam's training and experience as an attorney, his experience as the founder and Chief Executive Officer of an investment management firm and his experience as an author of various publications on the subject of investments.

Manoj P. Singh -- Mr. Singh's experience as chief operating officer and global managing director of a global professional services organization that provided accounting, consulting, tax, risk management, and financial advisory services.

Mona K. Sutphen -- Ms. Sutphen's extensive experience advising corporate, philanthropic and institutional investors on the intersection of geopolitics, policy and markets, as well as her prior service as White House Deputy Chief of Staff for Policy and as a US Foreign Service Officer, her work advising financial services companies on macro risks, and her service as director of public companies.

Interested Trustees

Robert L. Reynolds -- Mr. Reynolds's extensive experience as a senior executive of a major mutual fund organization in the United States and his previous role as President and Chief Executive Officer of Putnam Management and Putnam Investments, LLC, the previous parent company to Putnam Management and PAC.

Jane E. Trust -- Ms. Trust's investment management and risk oversight experience as an executive and portfolio manager and leadership roles within Franklin Templeton and affiliated entities.

Officers

The other officers of the fund, in addition to Robert L. Reynolds, the fund's President, are shown below. All of the officers of your fund listed below are employees of the Investment Manager or its affiliates or are members of the Trustees' independent administrative staff.

Name, Address[1], Year of Birth, Position(s) Held with Fund	**Length of Service with the Putnam Funds[2]**	**Principal Occupation(s) During Past 5 Years and Position(s) with Fund's Investment Adviser and Distributor[3]**
Jonathan S. Horwitz[4] (Born 1955) Executive Vice President, Principal Executive Officer, and Compliance Liaison	Since 2004	Executive Vice President, Principal Executive Officer, and Compliance Liaison, The Putnam Funds.
Alexander Y. Kymn (Born 1973) Vice President and Chief Legal Officer	Since September 2025	Associate General Counsel, Franklin Templeton; officer of certain funds in the Franklin Templeton fund complex; and **formerly**, Senior Counsel, Wells Fargo (banking) and officer of certain funds in Wells Fargo complex (2018-2019).
James F. Clark[3] (Born 1974) Vice President and Chief Compliance Officer	Since 2016	Chief Compliance Officer, Putnam Holdings and Putnam Management (2016 – Present). Associate General Counsel, Putnam Investments, Putnam Management and Putnam Retail Management (2003-2015).
Michael J. Higgins[4] (Born 1976) Vice President, Treasurer, and Clerk	Since 2010	Vice President, Treasurer, and Clerk, The Putnam Funds.
Kelley Hunt (Born 1984) AML Compliance Officer	Since 2024	Manager, U.S. Financial Crime Compliance, Franklin Templeton.
Jeffrey White (Born 1971) Vice President, Principal Financial Officer, Principal Accounting Officer, and Assistant Treasurer	Since 2024	Vice President, Fund Administration and Reporting, Franklin Templeton.
Denere P. Poulack[4] (Born 1968) Assistant Vice President, Assistant Clerk, and Assistant Treasurer	Since 2004	Assistant Vice President, Assistant Clerk, and Assistant Treasurer, The Putnam Funds.

[1] The address of each Officer, other than as noted below, is 100 Federal Street, Boston, MA 02110. Ms. Hunt's address is 100 Fountain Parkway, St. Petersburg, FL 33716. Messrs. Kymn and White's address is One Franklin Parkway, San Mateo, CA 94403.

[2] Each officer serves for an indefinite term, until his or her resignation, retirement, death or removal.

[3] Prior positions and/or officer appointments with the fund or the fund's investment adviser and distributor have been omitted.

[4] Officers of the fund indicated are members of the Trustees' independent administrative staff. Compensation for these individuals is fixed by the Trustees and reimbursed to the Investment Manager by the funds, except in certain cases where a fund has a unitary fee and/or expense limitation arrangement whereby the Investment Manager is responsible for all or a portion of these individuals' compensation.

Except as stated above, the principal occupations of the officers and Trustees for the last five years have been with the employers as shown above, although in some cases they have held different positions with such employers.

Leadership Structure and Standing Committees of the Board of Trustees

For details regarding the number of times the standing committees of the Board of Trustees met during a fund's last fiscal year, see "Trustee responsibilities and fees" in Part I of this SAI.

Board Leadership Structure. Currently, 10 of the 12 Trustees of your fund are Independent Trustees, meaning that they are not considered "interested persons" of your fund or the Investment Manager. These Independent Trustees must vote separately to approve all financial arrangements and other agreements with the Investment Manager and other affiliated parties. The role of independent trustees has been characterized as that of a “watchdog” charged with oversight to protect shareholders’ interests against overreaching and abuse by those who are in a position to control or influence a fund. Your fund’s Independent Trustees meet regularly as a group in executive session (*i.e.*, without representatives of the Investment Manager or its affiliates present). An Independent Trustee currently serves as chair of the Board.

Taking into account the number, the diversity and the complexity of the funds overseen by the Board and the aggregate amount of assets under management, your fund’s Trustees have determined that the efficient conduct of the Board's affairs makes it desirable to delegate responsibility for certain specific matters to committees of the Board. The Executive Committee, Audit, Compliance and Risk Committee, and Board Policy and Nominating Committee are authorized to take action on certain matters as specified in their charters or in policies and procedures relating to the governance of the funds; with respect to other matters, these committees review and evaluate and make recommendations to the Trustees as they deem appropriate. The other committees also review and evaluate matters specified in their charters and make recommendations to the Trustees as they deem appropriate. Each committee may utilize the resources of your fund’s independent staff, counsel and independent registered public accountants as well as other experts. The committees meet as often as appropriate, either in conjunction with regular meetings of the Trustees or otherwise. The membership and chair of each committee are appointed by the Trustees upon recommendation of the Board Policy and Nominating Committee. Each committee is chaired by an Independent Trustee and, except as noted below, the membership and chairs of each committee consist exclusively of Independent Trustees.

The Trustees have determined that this committee structure also allows the Board to focus more effectively on the oversight of risk as part of its broader oversight of the fund's affairs. While risk management is the primary responsibility of the Investment Manager, the Trustees receive reports regarding investment risks, compliance risks and other risks. The Board and certain committees also meet periodically with the funds’ Chief Compliance Officer to receive compliance reports. In addition, the Board and its Investment Oversight Committees meet periodically with the portfolio managers of the funds to receive reports regarding the management of the funds. The Board's committee structure allows separate committees to focus on different aspects of these risks and their potential impact on some or all of the funds and to discuss with the Investment Manager how it monitors and controls risks.

The Board recognizes that the reports it receives concerning risk management matters are, by their nature, typically summaries of the relevant information. Moreover, the Board recognizes that not all risks that may affect your fund can be identified in advance; that it may not be practical or cost effective to eliminate or to mitigate certain risks; that it may be necessary to bear certain risks (such as investment-related risks) in seeking to achieve your fund’s investment objectives; and that the processes, procedures and controls employed to address certain risks may be limited in their effectiveness. As a result of the foregoing and for other reasons, the Board’s risk management oversight is subject to substantial limitations.

Audit, Compliance and Risk Committee. The Audit, Compliance and Risk Committee provides oversight on matters relating to the integrity of the funds’ financial statements, compliance with legal and regulatory requirements, the performance of each fund’s internal audit function, Codes of Ethics issues, and certain aspects of overseeing the Investment Manager’s risk assessment and risk management. This oversight is discharged by regularly meeting with management and the funds’ independent registered public accountants and remaining current with respect to industry developments. Duties of this Committee also include the review and evaluation of all matters and relationships pertaining to the funds’ independent registered public accountants, including their independence, and the review of the Investment Manager’s oversight of the funds’ significant other service providers (unless another committee, or the Board, has this responsibility). The Committee also oversees all dividends and distributions by the funds by making recommendations to the Trustees regarding the amount and timing of dividends and distributions paid by the funds, and determining such matters when the Trustees are not in session. The Committee also oversees the policies and procedures pursuant to which the Investment Manager prepares recommendations for

dividends and distributions, and meets regularly with representatives of the Investment Manager to review the implementation of these policies and procedures. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters.

The Committee also oversees the valuation of assets of the funds overseen by the Board of Trustees and reviews the funds' policies and procedures for achieving accurate and timely pricing of fund shares. The Committee oversees implementation of these policies, including fair value determinations of individual investments made by the Investment Manager or other designated agents of the funds. The Committee also reviews (i) compliance by money market funds with Rule 2a-7 under the 1940 Act, (ii) in-kind redemptions by fund affiliates, (iii) the correction of occasional pricing errors, and (iv) the Investment Manager's oversight of pricing vendors. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters.

The members of the Committee include only Independent Trustees. Each member of the Committee also is "independent," as that term is interpreted for purposes of Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the listing standards of the NYSE. The Board has adopted a written charter for the Committee. The current members are Messrs. Singh (Chair) and McGreevey and Mses. Pillai and Sutphen.

Board Policy and Nominating Committee. The Board Policy and Nominating Committee reviews matters pertaining to the operations of the Board of Trustees and its Committees, the compensation of the Trustees and their staff, and the conduct of legal affairs for the funds. The Committee evaluates and recommends all candidates for election as Trustees and recommends the appointment of members and chairs of each board committee. The Committee will consider nominees for Trustee recommended by shareholders of a fund provided that such recommendations are submitted by the date disclosed in the fund's proxy statement and otherwise comply with applicable securities laws, including Rule 14a-8 under the Exchange Act. The Committee also reviews policy matters affecting the operation of the Board and its independent staff. In addition, the Committee oversees the voting of proxies associated with portfolio investments of the funds with the goal of ensuring that these proxies are voted in the best interest of the funds' shareholders. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters. The Committee generally believes that the Board benefits from diversity of background, experience and views among its members, and considers this as a factor in evaluating the composition of the Board, but has not adopted any specific policy in this regard. The Committee is composed entirely of Independent Trustees. The current members are Dr. Hill (Chair), Mses. Baumann and Sutphen, and Mr. Putnam.

Contract Committee. The Contract Committee reviews and evaluates at least annually arrangements pertaining to (i) the engagement of the Investment Manager and its affiliates to provide services to the funds, (ii) the expenditure of the funds' assets for distribution purposes pursuant to Distribution Plans of the funds, and (iii) the engagement of other persons to provide material services to the funds, including in particular those instances where the cost of services is shared between the funds and the Investment Manager and its affiliates or where the Investment Manager or its affiliates have a material interest. The Committee also reviews the proposed organization of new fund products and proposed structural changes to existing funds. In addition, the Committee reviews communications with, and the quality of services provided to, shareholders and oversees the marketing and sale of fund shares by Franklin Distributors. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters.

The Committee also reviews the funds' policies regarding the execution of portfolio trades and the Investment Manager's (and its affiliates') practices and procedures relating to the implementation of those policies. The Committee reviews periodic reports on the cost and quality of execution of portfolio transactions and the extent to which brokerage commissions have been used (i) by the Investment Manager (or its affiliates) to obtain brokerage and research services generally useful to it (or its affiliates) in managing the portfolios of the funds and of its other clients, and (ii) by the funds to pay for certain fund expenses. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters.

The Committee is composed entirely of Independent Trustees. The current members are Messrs. Putnam (Chair) and Ahamed, Mses. Baumann and Domotorffy, and Dr. Hill.

Executive Committee. The functions of the Executive Committee are twofold. The first is to ensure that the funds' business may be conducted at times when it is not feasible to convene a meeting of the Trustees or for the Trustees to act by written consent. The Committee may exercise any or all of the power and authority of the Trustees when the Trustees are not in session. The second is to review annual and ongoing goals, objectives and priorities for the Board and to facilitate coordination of all efforts

between the Trustees and the Investment Manager on behalf of the shareholders of the funds. The Committee currently consists of Ms. Baumann (Chair) and Messrs. Putnam and Singh.

Investment Oversight Committees. The Investment Oversight Committees regularly meet with investment personnel of the Investment Manager and its affiliates to review the investment performance and strategies of the funds in light of their stated goals and policies. The Committees seek to identify any compliance issues that are unique to the applicable categories of funds and work with the appropriate board committees to ensure that any such issues are properly addressed. The Committees review the proposed investment objectives, policies and restrictions of new fund products and proposed changes to investment objectives, policies and restrictions of existing funds. The Committees also review matters relating to the exemptive order(s) and rules specifically applicable to the ETFs and any other matters arising from time to time relating to the ETFs that are not otherwise within the general subject matter purview of another committee. The current members of Investment Oversight Committee A are Mses. Domotorffy (Chair), Baumann, and Trust, Dr. Hill, and Messrs. McGreevey and Putnam, and the current members of Investment Oversight Committee B are Mses. Pillai (Chair), Murphy and Sutphen, and Messrs. Ahamed, Reynolds, and Singh.

Indemnification of Trustees

The Agreement and Declaration of Trust of each fund provides that the fund will indemnify its Trustees and officers against liabilities and expenses incurred in connection with litigation in which they may be involved because of their offices with the fund, except if it has been finally adjudicated that (a) they have not acted in good faith, (b) they have not acted in the reasonable belief that their actions were (i) in the best interests of the fund or (ii) at least were not opposed to the best interests of the fund, (c) in the case of a criminal proceeding, they had reasonable cause to believe the action was unlawful or (d) they were liable to the fund or its shareholders by reason of willful misfeasance, bad faith, gross negligence or reckless disregard of his or her duties. The fund, at its expense, provides liability insurance for the benefit of its Trustees and officers.

For details of Trustees' fees paid by the fund and information concerning retirement guidelines for the Trustees, see "Charges and expenses" in Part I of this SAI.

The Investment Manager and its Affiliates

Putnam Investment Management, LLC

If so disclosed in the fund's prospectus, Putnam Management serves as Investment Manager to the fund. Putnam Management is one of America's oldest money management firms. Putnam Management has been managing mutual funds since 1937.

Franklin Advisers, Inc.

If so disclosed in the fund's prospectus, Franklin Advisers serves as Investment Manager to the fund. Franklin Advisers, Inc., a global investment organization, is a California corporation formed on October 31, 1985.

Additional information about Putnam Management and Franklin Advisers

Putnam Management and Franklin Advisers are indirect, wholly-owned subsidiaries of Franklin Templeton, a Delaware corporation. Franklin Templeton, whose principal executive offices are at One Franklin Parkway, San Mateo, California 94403, is a global investment management organization.

Trustees and officers of the fund who are also officers of Putnam Management, Franklin Advisers or their affiliates or who are stockholders of Franklin Templeton or its affiliates will benefit from the advisory fees, sales commissions, distribution fees and transfer agency fees paid or allowed by the fund.

The Management Contract

Under a management contract between the fund and the Investment Manager (the "Management Contract"), subject to such policies as the Trustees may determine, the Investment Manager, at its expense, furnishes continuously an investment program for the fund and makes investment decisions on behalf of the fund. Subject to the control of the Trustees, the Investment

Manager also manages, supervises and conducts the other affairs and business of the fund, furnishes office space and equipment, provides bookkeeping and clerical services (including determination of the fund's net asset value, but excluding shareholder accounting services) and typically places orders for the purchase and sale of the fund's portfolio securities (in some cases, Putnam Management and Franklin Advisers, in their capacities as sub-advisers to a fund, may place orders for the purchase and sale of the fund's portfolio securities, and references elsewhere in this SAI to the Investment Manager placing orders for the purchase and sale of portfolio securities shall be deemed to include Putnam Management and Franklin Advisers in their capacities as sub-advisers, as appropriate in the context). The Investment Manager may place fund portfolio transactions with broker-dealers that furnish the Investment Manager, without cost to it, certain research, statistical and quotation services of value to the Investment Manager and its affiliates in advising the fund and other clients. In so doing, the Investment Manager may cause the fund to pay greater brokerage commissions than it might otherwise pay.

Franklin Templeton Services, LLC ("FT Services") has entered into an agreement with the Investment Manager to provide certain administrative services and facilities for the fund. FT Services is an indirect, wholly-owned subsidiary of Franklin Templeton and is an affiliate of the Investment Manager and Franklin Distributors, its principal underwriter. The administrative services FT Services provides include preparing and maintaining books, records, and tax and financial reports, and monitoring compliance with regulatory requirements. The Investment Manager pays FT Services a monthly fee equal to the following:

0.150% of the fund's daily net assets up to and including $200 million;
0.135% of the fund's average daily net assets over $200 million, up to and including $700 million;
0.100% of the fund's average daily net assets over $700 million, up to and including $1.2 billion;
0.075% of the fund's average daily net assets in excess of $1.2 billion.

The monthly fees are paid by the Investment Manager and are not additional expenses of the fund.

For details of the Investment Manager's compensation under the Management Contract, see "Charges and expenses" in Part I of this SAI.

The Investment Manager's compensation under the Management Contract may be reduced in any year if the fund's expenses exceed the limits on investment company expenses imposed by any statute or regulatory authority of any jurisdiction in which shares of the fund are qualified for offer or sale. The term "expenses" is defined in the statutes or regulations of such jurisdictions, and generally excludes brokerage commissions, taxes, interest, extraordinary expenses and, if the fund has a distribution plan, payments made under such plan.

Fund-specific expense limitation. Under the Management Contract, the Investment Manager may reduce its compensation to the extent that the fund's expenses exceed such lower expense limitation as the Investment Manager may, by notice to the fund, declare to be effective. For the purpose of determining any such limitation on the Investment Manager's compensation, expenses of the fund shall not reflect the application of commissions or cash management credits that may reduce designated fund expenses. The terms of any such expense limitation specific to a particular fund are described in the prospectus and/or Part I of this SAI.

General expense limitation.

For retail open-end funds except Putnam Dynamic Asset Allocation Equity Fund, the Putnam Retirement Advantage Funds, the Putnam Sustainable Retirement Funds, Putnam Ultra Short MAC Series, and Putnam Short Term Investment Fund: As of July 1, 2024, through the expiration of the one-year period following the effective date of the next annual update of each fund's registration statement, the Investment Manager will waive fees and/or reimburse expenses of the fund to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses (including borrowing costs, *i.e.,* short selling and lines of credit costs), extraordinary expenses, acquired fund fees and expenses, and payments under the fund's investor servicing contract, the fund's investment management contract (including any applicable performance-based upward or downward adjustment to a fund's base management fee), and the fund's distribution plans, to an annual (measured on a fiscal year basis) rate of 0.20% of the fund's average net assets.

For Putnam Dynamic Asset Allocation Equity Fund Only: the Investment Manager has contractually agreed to waive fees and/or reimburse expenses of the fund through September 30, 2026 to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses (including borrowing costs, i.e., short selling and lines of credit costs), extraordinary expenses, acquired fund fees and expenses, and payments under the fund's investor servicing

contract, the fund's investment management contract, and the fund's distribution plans, to an annual (measured on a fiscal year basis) rate of 0.02% of the fund's average net assets.

For all funds: In addition to the fee paid to the Investment Manager, the fund reimburses the Investment Manager for the compensation and related expenses of certain officers of the fund and their assistants who provide certain administrative services for the fund and the other funds, each of which bears an allocated share of the foregoing costs, except in certain cases where a fund has a unitary fee and/or expense limitation arrangement whereby the Investment Manager is responsible for all or a portion of these individuals' compensation. The aggregate amount of all such payments and reimbursements is determined annually by the Trustees.

The amount of this reimbursement for the fund's most recent fiscal year is included in "Charges and expenses" in Part I of this SAI. The Investment Manager pays all other salaries of officers of the fund. The fund pays all expenses not assumed by the Investment Manager including, without limitation, auditing, legal, custodial, investor servicing and shareholder reporting expenses. The fund pays the cost of typesetting for its prospectuses and the cost of printing and mailing any prospectuses sent to its shareholders. Franklin Distributors pays the cost of printing and distributing all other prospectuses.

The Management Contract provides that the Investment Manager shall not be subject to any liability to the fund or to any shareholder of the fund for any act or omission in the course of or connected with rendering services to the fund in the absence of willful misfeasance, bad faith, gross negligence or reckless disregard of its duties on the part of the Investment Manager.

The Management Contract may be terminated without penalty by vote of the Trustees or the shareholders of the fund, or by the Investment Manager, on not less than 60 days' written notice. It may be amended only by a vote of the shareholders of the fund. The Management Contract also terminates without payment of any penalty in the event of its assignment. The Management Contract provides that it will continue in effect only so long as such continuance is approved at least annually by vote of either the Trustees or the shareholders, and, in either case, by a majority of the Trustees who are not "interested persons" of the Investment Manager or the fund. In each of the foregoing cases, the vote of the shareholders is the affirmative vote of a "majority of the outstanding voting securities" as defined in the 1940 Act.

Sub-administrator JPMorgan Chase Bank, N.A. (JPMorgan) has an agreement with FT Services to provide certain sub-administrative services for the fund. The administrative services provided by JPMorgan include, but are not limited to, certain fund accounting, financial reporting, tax, corporate governance and compliance and legal administration services.

The Sub-Advisers

Putnam Investment Management, LLC

If so disclosed in the fund's prospectus, Putnam Management, an affiliate of Franklin Advisers, has been retained as a sub-adviser by Franklin Advisers, at Franklin Advisers' own expense, to make investment decisions for such fund assets as may be designated from time to time for its management by Franklin Advisers and to provide certain other advisory and related services pursuant to a subadvisory agreement between Franklin Advisers and Putnam Management. The other advisory and related services may include the facilitation of derivative transactions, sharing of investment research if so requested by Franklin Advisers, and proxy voting, and these services are subject to change over time.

The subadvisory agreement provides that Putnam Management shall not be subject to any liability to Franklin Advisers, the fund or any shareholder of the fund for any act or omission in the course of or connected with rendering services to the fund in the absence of willful misfeasance, bad faith, gross negligence or reckless disregard of its obligations and duties on the part of Putnam Management.

The subadvisory agreement may be terminated with respect to the fund without penalty by vote of the Trustees or shareholders of the fund, or by Franklin Advisers or Putnam Management upon 60 days' written notice. The subadvisory agreement also terminates without payment of any penalty in the event of its assignment or upon any termination of the management contract between Franklin Advisers and the fund. The subadvisory agreement provides that it will continue in effect only so long as such continuance is approved at least annually by vote of either the Trustees or the shareholders, and, in either case, by a majority of the Trustees who are not parties to the subadvisory agreement or "interested persons" thereof. In each of the foregoing cases, the vote of the shareholders is the affirmative vote of a "majority of the outstanding voting securities" as defined in the 1940 Act.

For additional information about Putnam Management, see "Putnam Investment Management, LLC" under "The Investment Manager and its Affiliates" above.

Franklin Advisers, Inc.

If so disclosed in the fund's prospectus, Franklin Advisers, an affiliate of Putnam Management, has been retained as a sub-adviser to provide by Putnam Management, at Putnam Management's own expense, to make investment decisions for such fund assets as may be designated from time to time for its management by Putnam Management and to provide certain other advisory and related services pursuant to a subadvisory agreement between Putnam Management and Franklin Advisers. The other advisory and related services may include the facilitation of foreign exchange transactions, sharing of investment research if so requested by Putnam Management, and managing the fund's investments in cash or cash equivalents, and these services are subject to change over time.

The subadvisory agreement provides that Franklin Advisers shall not be subject to any liability to Putnam Management, the fund or any shareholder of the fund for any act or omission in the course of or connected with rendering services to the fund in the absence of willful misfeasance, bad faith, gross negligence or reckless disregard of its obligations and duties on the part of Franklin Advisers.

The subadvisory agreement may be terminated with respect to the fund without penalty by vote of the Trustees or shareholders of the fund, or by Putnam Management or Franklin Advisers or upon 60 days' written notice. The subadvisory agreement also terminates without payment of any penalty in the event of its assignment or upon any termination of the management contract between Putnam Management and the fund. The subadvisory agreement provides that it will continue in effect only so long as such continuance is approved at least annually by vote of either the Trustees or the shareholders, and, in either case, by a majority of the Trustees who are not parties to the subadvisory agreement or "interested persons" thereof. In each of the foregoing cases, the vote of the shareholders is the affirmative vote of a "majority of the outstanding voting securities" as defined in the 1940 Act.

For additional information about Franklin Advisers, see "Franklin Advisers, Inc." under "The Investment Manager and its Affiliates" above.

Franklin Templeton Investment Management Limited

If so disclosed in the fund's prospectus, FTIML, an affiliate of the Investment Manager, has been retained as a sub-adviser for a portion of the assets of the fund, as determined from time to time by the Investment Manager pursuant to a sub-advisory agreement between the Investment Manager and FTIML. Under the terms of the sub-advisory agreement, FTIML, at its own expense, manages the investment and reinvestment of that portion of each such fund's portfolio that is allocated to FTIML from time to time by the Investment Manager, with FTIML determining what securities and other property will be purchased, retained or sold with respect to such portion, and placing all purchase and sale orders with respect to such portion, subject to the supervision of the Investment Manager. The Investment Manager may also, at its discretion, request FTIML to provide assistance with purchasing and selling securities for the fund, including placement of orders with certain broker-dealers, and to perform research and obtain and evaluate data relevant to the fund's investment strategies and policies.

Pursuant to the terms of the sub-advisory agreement, FTIML will pay all expenses incurred by it in connection with its activities under this agreement other than the cost of securities (including brokerage commissions, if any) purchased for the fund. The sub-advisory agreement provides that, in the absence of willful misfeasance, bad faith, gross negligence or reckless disregard of its obligations and duties on the part of FTIML, neither FTIML, nor any of its directors, officers, employees or affiliates, shall be subject to liability to the Investment Manager, the fund or any shareholder of the fund for any error of judgment or mistake of law or any other act or omission in the course of, or connected with, rendering services to the fund or for any losses that may be sustained in the purchase, holding or sale of any security by the fund.

The sub-advisory agreement may be terminated at any time with respect to a fund without penalty by vote of the Trustees or the shareholders of the fund upon not more than sixty days' written notice to the Investment Manager and FTIML, and by FTIML or the Investment Manager on not more than 60 days' written notice to the other party. The sub-advisory agreement also terminates without payment of any penalty in the event of its assignment. Subject to applicable law, it may be amended by a majority of the Trustees who are not "interested persons" of the Investment Manager or the fund. The sub-advisory agreement provides that it will continue in effect only so long as such continuance is approved at least annually by vote of either the Trustees or the

shareholders, and, in either case, by a majority of the Trustees who are not "interested persons" of the Investment Manager or the fund. In each of the foregoing cases, the vote of the shareholders is the affirmative vote of a "majority of the outstanding voting securities" as defined in the 1940 Act.

The Putnam Advisory Company, LLC

If so disclosed in the fund's prospectus, PAC, an affiliate of the Investment Manager, has been retained as a sub-adviser for a portion of the assets of the fund, as determined from time to time by the Investment Manager pursuant to a sub-advisory agreement between the Investment Manager and PAC. Under the terms of the sub-advisory agreement, PAC, at its own expense, manages the investment and reinvestment of that portion of each such fund's portfolio that is allocated to PAC from time to time by the Investment Manager, with PAC determining what securities and other property will be purchased, retained or sold with respect to such portion, and placing all purchase and sale orders with respect to such portion, subject to the supervision of the Investment Manager. The Investment Manager may also, at its discretion, request PAC to provide assistance with purchasing and selling securities for the fund, including placement of orders with certain broker-dealers, and to perform research and obtain and evaluate data relevant to the fund's investment strategies and policies.

Pursuant to the terms of the sub-advisory agreement, PAC will pay all expenses incurred by it in connection with its activities under this agreement other than the cost of securities (including brokerage commissions, if any) purchased for the fund. The sub-advisory agreement provides that, in the absence of willful misfeasance, bad faith, gross negligence or reckless disregard of its obligations and duties on the part of PAC, neither PAC, nor any of its directors, officers, employees or affiliates, shall be subject to liability to the Investment Manager, the fund or any shareholder of the fund for any error of judgment or mistake of law or any other act or omission in the course of, or connected with, rendering services to the fund or for any losses that may be sustained in the purchase, holding or sale of any security by the fund.

The sub-advisory agreement may be terminated at any time with respect to a fund without penalty by vote of the Trustees or the shareholders of the fund upon not more than sixty days' written notice to the Investment Manager and PAC, and by PAC or the Investment Manager on not more than 60 days' written notice to the other party. The sub-advisory agreement also terminates without payment of any penalty in the event of its assignment. Subject to applicable law, it may be amended by a majority of the Trustees who are not "interested persons" of the Investment Manager or the fund. The sub-advisory agreement provides that it will continue in effect only so long as such continuance is approved at least annually by vote of either the Trustees or the shareholders, and, in either case, by a majority of the Trustees who are not "interested persons" of the Investment Manager or the fund. In each of the foregoing cases, the vote of the shareholders is the affirmative vote of a "majority of the outstanding voting securities" as defined in the 1940 Act.

Portfolio Transactions

Potential conflicts of interest in managing multiple accounts.

Investment Manager

Like other investment professionals with multiple clients, the fund's Portfolio Manager(s) may face certain potential conflicts of interest in connection with managing both the fund and the other accounts listed under **"PORTFOLIO MANAGER(S)" "Other accounts managed"** at the same time. The paragraphs below describe some of these potential conflicts, which the Investment Manager believes are faced by investment professionals at most major financial firms. As described below, the Investment Manager and the Trustees have adopted compliance policies and procedures that attempt to address certain of these potential conflicts.

The management of accounts with different advisory fee rates and/or fee structures, including accounts that pay advisory fees based on account performance ("performance fee accounts"), may raise potential conflicts of interest by creating an incentive to favor higher-fee accounts. These potential conflicts may include, among others:

- The most attractive investments could be allocated to higher-fee accounts or performance fee accounts.
- The trading of higher-fee accounts could be favored as to timing and/or execution price. For example, higher-fee accounts could be permitted to sell securities earlier than other accounts when a prompt sale is desirable or to buy securities at an earlier and more opportune time.
- The trading of other accounts could be used to benefit higher-fee accounts (front-running).

• The investment management team could focus their time and efforts primarily on higher-fee accounts due to a personal stake in compensation.

The Investment Manager attempts to address these potential conflicts of interest relating to higher-fee accounts through various compliance policies that are generally intended to place all accounts, regardless of fee structure, on the same footing for investment management purposes. For example, under the Investment Manager's policies:

• Performance fee accounts must be included in all standard trading and allocation procedures with all other accounts.
• All accounts must be allocated to a specific category of account and trade in parallel with allocations of similar accounts based on the procedures generally applicable to all accounts in those groups (e.g., based on relative risk budgets of accounts).
• All trading must be effected through Putnam's trading desks and normal queues and procedures must be followed (i.e., no special treatment is permitted for performance fee accounts or higher-fee accounts based on account fee structure).
• Front running is strictly prohibited.
• Except as provided in Part I of this SAI, the fund's Portfolio Manager(s) may not be guaranteed or specifically allocated any portion of a performance fee.

As part of these policies, the Investment Manager has also implemented trade oversight and review procedures in order to monitor whether particular accounts (including higher-fee accounts or performance fee accounts) are being favored over time.

Potential conflicts of interest may also arise when the Portfolio Manager(s) have personal investments in other accounts that may create an incentive to favor those accounts. As a general matter and subject to limited exceptions, the Investment Manager's investment professionals do not have the opportunity to invest in client accounts, other than Putnam funds. However, in the ordinary course of business, the Investment Manager or related persons may from time to time establish "pilot" or "incubator" accounts for the purpose of testing proposed investment strategies and products before offering them to clients. These pilot accounts may be in the form of registered investment companies, private funds such as partnerships or separate accounts established by the Investment Manager or an affiliate. The Investment Manager or an affiliate supplies the funding for these accounts. Putnam employees, including the fund's Portfolio Manager(s), may also invest in certain pilot accounts. The Investment Manager, and to the extent applicable, the Portfolio Manager(s) will benefit from the favorable investment performance of pilot accounts. Pilot funds and accounts may, and frequently do, invest in the same securities as the client accounts. The Investment Manager's policy is to treat pilot accounts in the same manner as client accounts for purposes of trading allocation – neither favoring nor disfavoring them except as is legally required. For example, pilot accounts are normally included in the Investment Manager's daily block trades to the same extent as client accounts (except that pilot accounts do not participate in initial public offerings).

A potential conflict of interest may arise when the fund and other accounts purchase or sell the same securities. On occasions when the Portfolio Manager(s) consider the purchase or sale of a security to be in the best interests of the fund as well as other accounts, the Investment Manager's trading desk may, to the extent permitted by applicable laws and regulations and where practicable, aggregate the securities to be sold or purchased in order to obtain the best execution and lower brokerage commissions, if any. Aggregation of trades may create the potential for unfairness to the fund or another account if one account is favored over another in allocating the securities purchased or sold – for example, by allocating a disproportionate amount of a security that is likely to increase in value to a favored account. The Investment Manager's trade allocation policies generally provide that each day's transactions in securities that are purchased or sold by multiple accounts are, insofar as possible, averaged as to price and allocated between such accounts (including the fund) in a manner which in the Investment Manager's opinion is equitable to each account and in accordance with the amount being purchased or sold by each account. However, accounts advised or sub-advised by FTIML will only place trades at an execution-only commission rate, whereas other Putnam accounts may pay an additional amount for research and other products and services (a "bundled" or "full service" rate). The Investment Manager may aggregate trades in FTIML accounts with other Putnam accounts that pay a bundled rate as long as all participating accounts pay the same execution rate. To the extent that non- FTIML accounts pay a bundled rate, the FTIML and other the Investment Manager accounts would not be paying the same total commission rate. Certain other exceptions exist for specialty, regional or sector accounts. Trade allocations are reviewed on a periodic basis as part of the Investment Manager's trade oversight procedures in an attempt to ensure fairness over time across accounts.

"Cross trades," in which one Putnam account sells a particular security to another account (potentially saving transaction costs for both accounts), may also pose a potential conflict of interest. Cross trades may be seen to involve a potential conflict of interest if, for example, one account is permitted to sell a security to another account at a higher price than an independent third party would pay, or if such trades result in more attractive investments being allocated to higher-fee accounts. The Investment

Manager and the fund's Trustees have adopted compliance procedures that provide that any transactions between the fund and another Putnam-advised account are to be made at an independent current market price, as required by law.

Another potential conflict of interest may arise based on the different goals and strategies of the fund and other accounts. For example, another account may have a shorter-term investment horizon or different goals, policies or restrictions than the fund. Depending on goals or other factors, the Portfolio Manager(s) may give advice and make decisions for another account that may differ from advice given, or the timing or nature of decisions made, with respect to the fund. In addition, investment decisions are the product of many factors in addition to basic suitability for the particular account involved. Thus, a particular security may be bought or sold for certain accounts even though it could have been bought or sold for other accounts at the same time. More rarely, a particular security may be bought for one or more accounts managed by the Portfolio Manager(s) when one or more other accounts are selling the security (including short sales). There may be circumstances when purchases or sales of portfolio securities for one or more accounts may have an adverse effect on other accounts. As noted above, the Investment Manager has implemented trade oversight and review procedures to monitor whether any account is systematically favored over time.

Under federal securities laws, a short sale of a security by another client of the Investment Manager or its affiliates (other than another registered investment company) within five business days prior to a public offering of the same securities (the timing of which is generally not known to Putnam in advance) may prohibit the fund from participating in the public offering, which could cause the fund to miss an otherwise favorable investment opportunity or to pay a higher price for the securities in the secondary markets.

The fund's Portfolio Manager(s) may also face other potential conflicts of interest in managing the fund, and the description above is not a complete description of every conflict that could be deemed to exist in managing both the fund and other accounts. For information on restrictions imposed on personal securities transactions of the fund's Portfolio Manager(s), please see "Personal Investments by Employees of the Investment Manager and Franklin Distributors and Officers and Trustees of the Fund."

For information about other funds and accounts managed by the fund's Portfolio Manager(s), please refer to "Who oversees and manages the fund(s)?" in the prospectus and **"PORTFOLIO MANAGER(S)" "Other accounts managed"** in Part I of the SAI.

Brokerage and research services.

Transactions on stock exchanges, commodities markets and futures markets and other agency transactions involve the payment by the fund of negotiated brokerage commissions. Such commissions may vary among different brokers. A particular broker may charge different commissions according to such factors as execution venue and exchange. Although the fund does not typically pay commissions for principal transactions in the over-the-counter markets, such as the markets for most fixed income securities and certain derivatives, an undisclosed amount of profit or "mark-up" is included in the price the fund pays. In underwritten offerings, the price paid by the fund includes a disclosed, fixed commission or discount retained by the underwriter or dealer. **See "Charges and expenses" in Part I of this SAI for information concerning commissions paid by the fund**.

It has for many years been a common practice in the investment advisory business for broker-dealers that execute portfolio transactions for the clients of advisers of investment companies and other institutional investors to provide those advisers with brokerage and research services, as defined in Section 28(e) of the Exchange Act. Consistent with this practice, the Investment Manager receives brokerage and research services from broker-dealers with which the Investment Manager places the fund's portfolio transactions. The products and services that broker-dealers may provide to the Investment Manager's managers and analysts include, among others, trading systems and other brokerage services, economic and political analysis, fundamental and macro investment research, industry and company reviews, statistical information, market data, evaluations of investments, strategies, markets and trading venues, recommendations as to the purchase and sale of investments, performance measurement services and meetings with management of current or prospective portfolio companies or with industry experts. Some of these services are of value to the Investment Manager and its affiliates in advising various of their clients (including the fund), although not all of these services are necessarily useful and of value in managing the fund. Research services provided by broker-dealers are supplemental to the Investment Manager's own research efforts and relieve the Investment Manager of expenses it might otherwise have borne in generating such research. The management fee paid by the fund is not reduced because the Investment Manager and its affiliates receive brokerage and research services even though the Investment Manager might otherwise be required to purchase some of these services for cash. The Investment Manager may also use portfolio transactions to generate "soft dollar" credits to pay for "mixed-use" services (i.e., products or services that may be used both for investment/brokerage- and non-investment/brokerage-related purposes), but in such instances the Investment Manager

uses its own resources to pay for that portion of the mixed-use product or service that in its good-faith judgment does not relate to investment or brokerage purposes. The Investment Manager may also allocate trades to generate soft dollar credits for third-party investment research reports and related fundamental research.

The Investment Manager places all orders for the purchase and sale of portfolio investments for the funds, and buys and sells investments for the funds, through a substantial number of brokers and dealers. In selecting broker-dealers to execute the funds' portfolio transactions, the Investment Manager uses its best efforts to obtain for each fund the most favorable price and execution reasonably available under the circumstances, except to the extent it may be permitted to pay higher brokerage commissions as described below. In seeking the most favorable price and execution and in considering the overall reasonableness of the brokerage commissions paid, the Investment Manager, having in mind the fund's best interests, considers all factors it deems relevant, including, in no particular order of importance, and by way of illustration, the price, size and type of the transaction, the nature of the market for the security or other investment, the amount of the commission, research and brokerage services provided by a broker-dealer, the timing of the transaction taking into account market prices and trends, the reputation, experience and financial stability of the broker-dealer involved, the benefit of any capital committed by a broker-dealer to facilitate the efficient execution of the transaction and the quality of service rendered by the broker-dealer in other transactions.

The Investment Manager may cause the fund to pay a broker-dealer that provides "brokerage and research services" (as defined in the Exchange Act and as described above) to the Investment Manager an amount of disclosed commission for effecting securities transactions on stock exchanges and other transactions for the fund on an agency basis in excess of the commission another broker-dealer would have charged for effecting that transaction. The Investment Manager may also instruct an executing broker to "step out" a portion of the trades placed with a broker to other brokers that provide brokerage and research services to the Investment Manager. The Investment Manager's authority to cause the fund to pay any such greater commissions or to instruct a broker to "step out" a portion of a trade is subject to the requirements of applicable law and such policies as the Trustees may adopt from time to time. It is the position of the staff of the SEC that Section 28(e) of the Exchange Act does not apply to the payment of such greater commissions in "principal" transactions. Accordingly, the Investment Manager will use its best effort to obtain the most favorable price and execution available with respect to such transactions, as described above.

The Management Contract provides that commissions, fees, brokerage or similar payments received by the Investment Manager or an affiliate in connection with the purchase and sale of portfolio investments of the fund, less any direct expenses approved by the Trustees, shall be recaptured by the fund through a reduction of the fee payable by the fund under the Management Contract. The Investment Manager seeks to recapture for the fund soliciting dealer fees on the tender of the fund's portfolio securities in tender or exchange offers. Any such fees which may be recaptured are likely to be minor in amount.

For those funds sub-advised by FTIML and where FTIML places trades on behalf of those funds, the rules of the United Kingdom's Financial Conduct Authority (the "FCA Rules") apply with respect to the receipt of investment research. Under the FCA Rules, FTIML may not obtain research using brokerage commissions paid by funds sub-advised by FTIML. FTIML will use only "hard dollars" (i.e., from its own resources) to acquire external research used by London-based personnel, including fixed income personnel, except with respect to Minor Non-Monetary Benefits.

Minor Non-Monetary Benefits include, among other categories:

- Research from independent research providers who are not engaged in execution services and are not part of a financial services group that offers execution or brokerage services;
- Research on listed and unlisted small and medium-sized enterprises with a market capitalization below £200 million;
- Research focusing on fixed income, currency, and commodity investment strategies; and
- Written research that is openly available to other firms or to the general public.

FTIML may use soft dollar commissions generated by trades of the Investment Manager and other Putnam affiliates other than FTIML to obtain research received by employees of FTIML that qualify as a Minor Non-Monetary Benefit.

Principal Underwriter

Franklin Distributors, located at One Franklin Parkway, San Mateo, CA 94403-1906, is the principal underwriter of shares of the fund and the other continuously offered Putnam Funds. Franklin Distributors is a registered broker-dealer, a member of the Financial Industry Regulatory Authority, and an indirect, wholly-owned subsidiary of Franklin Templeton. Franklin Distributors is

not obligated to sell any specific amount of shares of the fund and will purchase shares for resale only against orders for shares. See "Charges and expenses" in Part I of this SAI for information on sales charges and other payments received by Franklin Distributors and Putnam Retail Management, the fund's principal underwriter prior to August 2, 2024.

Personal Investments by Employees of Putnam Management, Franklin Advisers, FTIML, PAC and Franklin Distributors and Officers and Trustees of the Fund

Employees of Putnam Management, Franklin Advisers, FTIML, PAC and Franklin Distributors and officers and Trustees of the fund are subject to significant restrictions on engaging in personal securities transactions. These restrictions are set forth in the Codes of Ethics adopted by Putnam Management, Franklin Advisers, FTIML, PAC and Franklin Distributors and by the fund (the "Code of Ethics"). The Code of Ethics, in accordance with Rule 17j-1 under the 1940 Act, contains provisions and requirements designed to identify and address certain conflicts of interest between personal investment activities and the interests of the fund.

The Code of Ethics does not prohibit personnel from investing in securities that may be purchased or held by the fund. However, the Code of Ethics, consistent with standards recommended by the Investment Company Institute's Advisory Group on Personal Investing and requirements established by Rule 17j-1 and rules adopted under the Investment Advisers Act of 1940, among other things, prohibits personal securities investments without pre-clearance, imposes time periods during which personal transactions may not be made in certain securities by employees with access to investment information, and requires the timely submission of broker confirmations and quarterly reporting of personal securities transactions. Additional restrictions apply to portfolio managers, traders, research analysts and others involved in the investment advisory process.

The Code of Ethics does not prohibit unaffiliated officers and Trustees from investing in securities that may be held by the fund; however, the Putnam Funds Code of Ethics regulates the personal securities transactions of unaffiliated Trustees of the fund, including limiting the time periods during which they may personally buy and sell certain securities and requiring them to submit reports of personal securities transactions under certain circumstances.

The fund's Trustees, in compliance with Rule 17j-1, approved the Code of Ethics and are required to approve any material changes to the Code of Ethics. The Trustees also provide continued oversight of personal investment policies and annually evaluate the implementation and effectiveness of the Code of Ethics.

Investor Servicing Agent

Putnam Investor Services, located at 100 Federal Street, Boston, MA 02110, is the fund's investor servicing agent (transfer, plan and dividend disbursing agent), for which it receives fees that are paid monthly by the fund.

For all funds other than the Putnam Retirement Advantage Funds and Putnam Sustainable Retirement Funds, the fee paid to Putnam Investor Services with respect to assets attributable to non-defined contribution plan accounts (which include accounts maintained directly with the fund, accounts underlying omnibus accounts maintained by financial intermediaries with the fund, accounts of Section 529 college savings plans that are allocated to the fund and accounts of certain funds that operate as funds-of-funds that are allocated to the fund (collectively "retail accounts")) holding class A, class C, class M, class N, class R and class Y shares, subject to certain limitations, is an annual fee that includes (1) a per account fee for each retail account of the fund that is applicable to the funds in its specified product category, and (2) a fee based on a specified rate of each fund's average daily net assets that is based on the rate applicable to the funds in its specified product category. The fund categories used for purposes of calculating the per account fee described above are based on product type. The accounts of 529 plans are included in the determination of the number of accounts at the underlying fund level in proportion to the percentage of the investing fund's net assets that are invested in the particular underlying fund.

For the Putnam Retirement Advantage Funds, the fees paid to Putnam Investor Services with respect to class A, class C, class R, class R3, class R4, class R5, class R6 and class Y shares, are based on a specified rate of the fund's average daily net assets attributable to each such class of shares.

For the Putnam Sustainable Retirement Funds, the fees paid to Putnam Investor Services with respect to assets attributable to retail accounts holding class A, class C, class R and class Y shares, are based on a specified rate of the fund's average daily net assets attributable to such retail accounts.

The fees paid to Putnam Investor Services with respect to defined contribution plan accounts holding class A, class C, class R and class Y shares are based on a specified rate of the average of the net assets attributable to such defined contribution plan accounts invested in a fund as of the end of the month and the end of the prior month.

As of July 1, 2024, except with respect to Putnam Ultra Short MAC Series, the Putnam Sustainable Retirement Funds and the Putnam Retirement Advantage Funds, Putnam Investor Services has agreed, through the later of the one year period following the effective date of the next annual update of each fund's registration statement or August 31, 2025, that the aggregate investor servicing fees for the fund's retail and defined contribution plan accounts will not exceed an annual rate of 0.250% of the fund's average daily net assets attributable to such accounts.

Other than for the Putnam Retirement Advantage Funds and Putnam Sustainable Retirement Funds, the fee paid to Putnam Investor Services with respect to class R5 shares is based on an annual rate of 0.15% of each fund's average daily net assets attributable to class R5 shares, except that an annual rate of 0.12% of each fund's average daily net assets attributable to class R5 shares applies to Putnam Dynamic Asset Allocation Conservative Fund, Putnam Global Income Trust and Putnam Income Fund.

For all funds other than the Putnam Retirement Advantage Funds and Putnam Sustainable Retirement Funds, the fee paid to Putnam Investor Services with respect to class R6 shares is based on an annual rate of 0.05% of each fund's average daily net assets attributable to class R6 shares.

The fee paid to Putnam Investor Services with respect to class I, class G and class P shares is based on an annual rate of 0.01% of each fund's average daily net assets attributable to class I shares, class G and class P shares, respectively.

For the Putnam Ultra Short MAC Series, no fee will be paid to Putnam Investor Services for investor-servicing related services.

Financial intermediaries (including brokers, dealers, banks, bank trust departments, registered investment advisers, financial planners, and retirement plan administrators) may own shares of the fund for the benefit of their customers in an omnibus account (including retirement plans). In these circumstances, the financial intermediaries or other third parties may provide certain sub-accounting and similar recordkeeping services for their customers' accounts.

In recognition of these services, Putnam Investor Services may make payments to these financial intermediaries or other third parties. Payments may be based on the number of underlying accounts in an omnibus account or the assets or share class held in an account. Putnam Investor Services also makes payments to financial intermediaries that charge networking fees for certain services provided in connection with the maintenance of shareholder accounts. These payments are described above under the heading "Distribution Plans – Additional Dealer Payments."

Custodian

JPMorgan, at its principal office at 270 Park Avenue, New York, NY 10017-2070, and at the offices of its branches and agencies throughout the world, acts as custodian of the fund's (and, if applicable, its Subsidiary's) securities and other assets.

Auditor

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Boston, Massachusetts 02210, is the fund's independent registered public accounting firm providing audit services, tax return review and other tax consulting services and assistance and consultation in connection with the review of various Securities and Exchange Commission filings.

Counsel to the Fund

Ropes & Gray LLP serves as counsel to the fund, and is located at Prudential Tower, 800 Boylston Street, Boston, Massachusetts 02199.

DETERMINATION OF NET ASSET VALUE

For all funds except Putnam Government Money Market Fund and Putnam Money Market Fund:
The fund determines the net asset value per share of each class of shares once each day the NYSE is open. Currently, the NYSE is closed Saturdays, Sundays and the following holidays: New Year's Day, Rev. Dr. Martin Luther King, Jr. Day, Presidents' Day, Good Friday, Memorial Day, Juneteenth, the Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. The fund determines net asset value as of the close of regular trading on the NYSE, normally 4:00 p.m. Eastern Time. The net asset value per share of each class equals the total value of its assets, less its liabilities, divided by the number of its outstanding shares.

For Putnam Government Money Market Fund and Putnam Money Market Fund:

The fund determines the net asset value per share of each class of shares once each day that the NYSE and Federal Reserve Bank of New York ("FRBNY") are both open. Currently, the NYSE is closed Saturdays, Sundays and when the following holidays are observed: New Year's Day, Rev. Dr. Martin Luther King, Jr. Day, Presidents' Day, Good Friday, Memorial Day, Juneteenth, the Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. The FRBNY is closed on each of these days (except Good Friday), as well as on Columbus Day/Indigenous Peoples' Day and Veterans Day. The fund determines net asset value as of the close of regular trading on the NYSE, normally 4:00 p.m. Eastern Time. The net asset value per share of each class equals the total value of its assets, less its liabilities, divided by the number of its outstanding shares.

On any day when the NYSE, the FRBNY or the bond markets (as recommended by the Securities Industry and Financial Markets Association ("SIFMA")) close early due to an emergency or other unanticipated event, or if trading on the NYSE is restricted, an emergency arises, or as otherwise permitted by the SEC, the fund reserves the right to close early and make its NAV calculation as of the time of its early close.

In the event the Federal Reserve wire payment system is open and the NYSE is open, the fund may, but is not required to, close for purchase or redemption transactions if—due to an emergency or other unanticipated event—the bond markets are closed for business as recommended by SIFMA. In the event the NYSE does not open for business because of an emergency or other unanticipated event, the fund may, but is not required to, open for purchase or redemption transactions if the Federal Reserve wire payment system is open and the bond markets are open.

When SIFMA recommends an early close to the bond markets on a business day before or after a day on which a holiday is celebrated, the fund reserves the right to close at or prior to the SIFMA recommended closing time. For calendar year 2025, SIFMA recommends an early close of the bond markets on April 17, 2025; May 23, 2025; July 3, 2025; November 28, 2025; December 24, 2025 and December 31, 2025. The schedule may be changed by SIFMA due to market conditions.

For all funds:
Assets of money market funds are valued at amortized cost pursuant to Rule 2a-7 under the 1940 Act. For other funds, securities and other assets ("Securities") for which market quotations are readily available are valued at prices which, in the opinion of the Investment Manager, most nearly represent the market values of such Securities. Currently, prices for these Securities are determined using the last reported sale price (or official closing price for Securities listed on certain markets) or, if no sales are reported (as in the case of some Securities traded over-the-counter), the mean between the last reported bid and ask prices, the "mid price" (prior to July 22, 2024, the last reported bid price was used). All other Securities are valued by the Investment Manager or other parties at their fair value following procedures approved by the Trustees.

Reliable market quotations are not considered to be readily available for, among other Securities, long-term corporate bonds and notes, certain preferred stocks, tax-exempt securities, and certain foreign securities. These investments are valued at fair value, generally on the basis of valuations furnished by approved pricing services, which determine valuations for normal, institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships between securities that are generally recognized by institutional traders. Other Securities, such as various types of options, are valued at fair value on the basis of valuations furnished by broker-dealers or other market intermediaries.

The Investment Manager values all other Securities at fair value using its internal resources. The valuation procedures applied in any specific instance are likely to vary from case to case. However, consideration is generally given to the financial position of

the issuer and other fundamental analytical data relating to the investment and to the nature of the restrictions on disposition of the Securities (including any registration expenses that might be borne by the fund in connection with such disposition). In addition, specific factors are also generally considered, such as the cost of the investment, the market value of any unrestricted Securities of the same class, the size of the holding, the prices of any recent transactions or offers with respect to such Securities and any available analysts' reports regarding the issuer. In the case of Securities that are restricted as to resale, the Investment Manager determines fair value based on the inherent worth of the Security without regard to the restrictive feature, adjusted for any diminution in value resulting from the restrictive feature.

Generally, trading in certain Securities (such as foreign securities) is substantially completed each day at various times before the close of the NYSE. The closing prices for these Securities in markets or on exchanges outside the U.S. that close before the close of the NYSE may not fully reflect events that occur after such close but before the close of the NYSE. As a result, the fund has adopted fair value pricing procedures under which, among other things, the Investment Manager monitors price movements by using a fair value pricing service offered through an independent pricing vendor. In addition, Securities held by some of the funds may be traded in foreign markets that are open for business on days that the fund is not, and the trading of such Securities on those days may have an impact on the value of a shareholder's investment at a time when the shareholder cannot buy and sell shares of the fund.

Currency exchange rates used in valuing Securities are normally determined as of 4:00 p.m. Eastern Time. Occasionally, events affecting such exchange rates may occur between the time of the determination of exchange rates and the close of the NYSE, which, in the absence of fair valuation, would not be reflected in the computation of the fund's net asset value. If events materially affecting the currency exchange rates occur during such period, then the exchange rates used in valuing affected Securities will be valued by the Investment Manager at their fair value following procedures approved by the Trustees.

In addition, because of the amount of time required to collect and process trading information as to large numbers of securities issues, the values of certain Securities (such as convertible bonds, U.S. government securities and tax-exempt securities) are determined based on market quotations collected before the close of the NYSE. Occasionally, events affecting the value of such Securities may occur between the time of the determination of value and the close of the NYSE, which, in the absence of fair value prices, would not be reflected in the computation of the fund's net asset value. If events materially affecting the value of such Securities occur during such period, then these Securities will be valued by the Investment Manager at their fair value following procedures approved by the Trustees. It is expected that any such instance would be very rare.

The fair value of Securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such Securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a Security at a given point in time and does not reflect an actual market price.

The fund may also value its Securities at fair value under other circumstances pursuant to procedures approved by the Trustees.

Money Market Funds

"Retail money market funds" and "government money market funds" each as defined by Rule 2a-7 under the 1940 Act generally value their portfolio securities at amortized cost according to Rule 2a-7 under the 1940 Act.

Since the net income of a money market fund is declared as a dividend each time it is determined, the net asset value per share of a retail money market fund and government money market fund typically remains at $1.00 per share immediately after such determination and dividend declaration. Any increase in the value of a shareholder's investment in a money market fund representing the reinvestment of dividend income is reflected by an increase in the number of shares of that fund in the shareholder's account on the last business day of each month. It is expected that a money market fund's net income will normally be positive each time it is determined. However, if because of realized losses on sales of portfolio investments, a sudden rise in interest rates, or for any other reason the net income of a fund determined at any time is a negative amount, a money market fund may offset such amount allocable to each then shareholder's account from dividends accrued during the month with respect to such account. If, at the time of payment of a dividend, such negative amount exceeds a shareholder's accrued dividends, a money market fund may reduce the number of outstanding shares by treating the shareholder as having contributed to the capital of the fund that number of full and fractional shares which represent the amount of the excess. Each shareholder is deemed to have agreed to such contribution in these circumstances by his or her investment in a money market fund.

INVESTOR SERVICES

Shareholder Information

Each time shareholders buy or sell shares, a statement confirming the transaction and listing their current share balance will be made available for viewing electronically or delivered via mail. (Under certain investment plans, a statement may only be sent quarterly.) The fund also sends annual and semiannual reports that keep shareholders informed about its portfolio and performance, and year-end tax information to simplify their recordkeeping. To help shareholders take full advantage of their Putnam investment, publications covering many topics of interest to investors are available on our website or from Putnam Investor Services. Shareholders may call Putnam Investor Services toll-free weekdays at 1-800-225-1581 between 8:00 a.m. and 8:00 p.m. Eastern Time for more information, including account balances. Shareholders can also visit franklintempleton.com.

Your Investing Account

The following information provides more detail concerning the operation of a Putnam Investing Account that is applicable for funds other than Putnam Ultra Short MAC Series. For further information or assistance, investors should consult Putnam Investor Services. Shareholders who purchase shares through an employer-sponsored retirement plan should note that not all of the services or features described below may be available to them, and they should contact their employer for details.

A shareholder may reinvest a cash distribution without a front-end sales charge or without the reinvested shares being subject to a CDSC, as the case may be, by delivering to Putnam Investor Services the uncashed distribution check. Putnam Investor Services must receive the properly endorsed check within 1 year after the date of the check.

The Investing Account also provides a way to accumulate shares of the fund. In most cases, after an initial investment, a shareholder may send checks to Putnam Investor Services, made payable to the fund, to purchase additional shares at the applicable offering price next determined after Putnam Investor Services receives the check. Checks must be drawn on a U.S. bank and must be payable in U.S. dollars.

Putnam Investor Services acts as the shareholder's agent whenever it receives instructions to carry out a transaction on the shareholder's account. Upon receipt of instructions that shares are to be purchased for a shareholder's account, shares will be purchased through the investment dealer designated by the shareholder. Shareholders may change investment dealers at any time by written notice to Putnam Investor Services, provided the new dealer has a sales agreement with Franklin Distributors.

Shares credited to an account are transferable upon written instructions in good order to Putnam Investor Services and may be sold to the fund as described under "How do I sell or exchange fund shares?" in the prospectus. Putnam Funds no longer issue share certificates. A shareholder may send to Putnam Investor Services any certificates which have been previously issued to enable more convenient maintenance of the account as a book-entry account.

Franklin Distributors, at its expense, may provide certain additional reports and administrative material to qualifying institutional investors with fiduciary responsibilities to assist these investors in discharging their responsibilities. Institutions seeking further information about this service should contact Franklin Distributors, which may modify or terminate this service at any time.

Each fund (other than Putnam Ultra Short MAC Series) pays Putnam Investor Services' fees for maintaining Investing Accounts.

Checkwriting Privilege. For those funds that allow shareholders, as disclosed in the prospectus, to redeem shares by check, Putnam is currently waiving the minimum per-check amount stated in the prospectus.

Reinstatement Privilege

For each fund other than Putnam Ultra Short MAC Series, an investor who has redeemed shares of the fund may reinvest within 90 days of such redemption the proceeds of such redemption in shares of the same class of the fund, or may reinvest within 90 days of such redemption the proceeds in shares of the same class of one of the other continuously offered Putnam funds (through the exchange privilege described in the prospectus), including, in the case of shares subject to a CDSC, the amount of CDSC charged on the redemption. Any such reinvestment would be at the net asset value of the shares of the fund(s) the investor selects, next determined after Putnam Investor Services receives a Reinstatement Certificate or equivalent instructions

which identify a specific redemption eligible for the reinstatement privilege. Putnam Investor Services may, in its discretion, accept such Certificate or equivalent instructions within 30 days following confirmation of an investment that qualifies for the reinstatement privilege. The time that the previous investment was held will be included in determining any applicable CDSC due upon redemptions and, in the case of class C shares, the eight -year period for conversion to class A shares. Reinstatements into class C or class M shares may be permitted even if the resulting purchase would otherwise be rejected for causing a shareholder's investments in such class to exceed the applicable investment maximum. Shareholders will receive from Franklin Distributors the amount of any CDSC paid at the time of redemption as part of the reinstated investment, which may be treated as capital gains to the shareholder for tax purposes.

Exercise of the Reinstatement Privilege does not alter the federal income tax treatment of any capital gains realized on a sale of fund shares, but to the extent that any shares are sold at a loss and the proceeds are reinvested in shares of the fund, some or all of the loss may be disallowed as a deduction. Consult your tax adviser. Investors who desire to exercise the Reinstatement Privilege should contact their investment dealer or Putnam Investor Services.

Exchange Privilege

Except as otherwise set forth in this section, by calling Putnam Investor Services, investors may exchange shares valued in the aggregate up to $500,000 for shares of the same class of a different Putnam fund between accounts with identical registrations, provided that no certificates are outstanding for such shares. During periods of unusual market changes and shareholder activity, shareholders may experience delays in contacting Putnam Investor Services by telephone to exercise the telephone exchange privilege.

Putnam Investor Services also makes exchanges between accounts in different Putnam funds with identical registrations that are in the same class of shares promptly after receiving a properly completed Exchange Authorization Form and, if issued, share certificates. If the shareholder is a corporation, partnership, agent, or surviving joint owner, Putnam Investor Services will require additional documentation of a customary nature. Because an exchange of shares involves the redemption of fund shares and reinvestment of the proceeds in shares of another Putnam fund, completion of an exchange may be delayed under unusual circumstances if the fund were to suspend redemptions or postpone payment for the fund shares being exchanged, in accordance with federal securities laws. Exchange Authorization Forms and prospectuses of the other Putnam funds are available from Franklin Distributors or investment dealers having sales contracts with Franklin Distributors. The prospectus of each fund describes its goal(s) and policies, and shareholders should obtain a prospectus and consider these objectives and policies carefully before requesting an exchange. Shares of certain Putnam funds are not available to residents of all states. The fund reserves the right to change or suspend the exchange privilege at any time. Shareholders would be notified of any change or suspension. Additional information is available from Putnam Investor Services at 1-800-225-1581.

Shareholders of other Putnam Funds may also exchange their shares at net asset value for shares of the fund, as set forth in the current prospectus of each fund. Exchanges from Putnam Government Money Market Fund, Putnam Money Market Fund or Putnam Ultra Short Duration Income Fund into another Putnam Fund may be subject to an initial sales charge. Class A shares of a Putnam Fund may be exchanged for class N shares of other Putnam Funds, if available. Class N shares of a Putnam Fund may be exchanged for class A shares of other Putnam Funds, if available.

For federal income tax purposes, an exchange is a sale on which the investor generally will realize a capital gain or loss depending on whether the net asset value at the time of the exchange is more or less than the investor's basis.

Same-Fund Exchange Privilege. Except as set forth below, exchanges between share classes of the same Putnam fund are not allowed.

Class A shareholders who are eligible to purchase class I (Putnam Mortgage Opportunities Fund only), class N, class R5, class R6 or class Y shares may exchange their class A shares for class I, class N, class R5, class R6 or class Y shares of the same fund, provided that such shares are offered to residents of the shareholder's state, that the class A shares are no longer subject to a CDSC, in the case of class R5 shares, the shares are available through the relevant retirement plan and, in the case of class R6 shares, the shares are available through the relevant retirement plan, advisory program or platform.

Class C shareholders who are eligible to purchase class A shares without a sales charge because the shareholders are (i) clients of broker-dealers, financial institutions, financial intermediaries or registered investment advisors that are approved by Franklin Distributors and charge a fee for advisory or investment services or (ii) clients of broker-dealers, financial institutions, or

financial intermediaries that have entered into an agreement with Franklin Distributors to offer shares through a fund 'supermarket' or retail self-directed brokerage account (with or without the imposition of a transaction fee) may exchange their class C shares for class A shares of the same fund, provided that (i) the class C shares are no longer subject to a CDSC and (ii) class A shares of such fund are offered to residents of the shareholder's state.

Class C shareholders who are eligible to purchase class Y shares may exchange their class C shares for class Y shares of the same fund, provided that the class C shares are no longer subject to a CDSC, or class Y shares of such fund are offered to residents of the shareholder's state.

Class I shareholders of Putnam Mortgage Opportunities Fund who are eligible to purchase class A, class R6 or class Y shares may exchange their class I shares for class A, class R6 or class Y shares of the same fund, provided that such shares are offered to residents of the shareholder's state and, in the case of class R6 shares, are available through the relevant retirement plan, advisory program or platform.

Class M shareholders who are eligible to purchase class Y shares may exchange their class M shares for class Y shares of the same fund, provided that class Y shares of such fund are offered to residents of the shareholder's state and, if applicable, the shares are available through the relevant retirement plan.

Class N shareholders who are eligible to purchase class A shares may exchange their class N shares for class A shares of the same fund, provided that class A shares of such fund are offered to residents of the shareholder's state, the class N shares are no longer subject to a CDSC, and, if applicable, the class A shares are available through the relevant retirement plan.

Class R shareholders who are eligible to purchase class R3, class R4, class R5 or class R6 shares may exchange their class R shares for class R3, class R4, class R5 or class R6 shares of the same fund, provided that such shares are offered to residents of the shareholder's state, in the case of class R3, R4 and R5 shares, the shares are available through the relevant retirement plan and, in the case of class R6 shares, the shares are available through the relevant retirement plan, advisory program or platform.

Class R3 shareholders who are eligible to purchase class R, class R4, class R5 or class R6 shares may exchange their class R3 shares for class R, class R4, class R5 or class R6 shares of the same fund, provided that such shares are offered to residents of the shareholder's state and are available through the relevant retirement plan.

Class R4 shareholders who are eligible to purchase class R, class R3, class R5 or class R6 shares may exchange their class R4 shares for class R, class R3, class R5 or class R6 shares of the same fund, provided that such shares are offered to residents of the shareholder's state and are available through the relevant retirement plan.

Class R5 shareholders who are eligible to purchase class R, class R3, class R4 or class R6 shares may exchange their class R5 shares for class R, class R3, class R4 or class R6 of the same fund, provided that such shares are offered to residents of the shareholder's state and are available through the relevant retirement plan.

Class R6 shareholders who are eligible to purchase class A, class I (Putnam Mortgage Opportunities Fund only), class R, class R3, class R4, class R5 or class Y shares may exchange their class R6 shares for class A, class I, class R, class R5 or class Y shares of the same fund, provided that such shares are offered to residents of the shareholder's state and are available through the relevant retirement plan, advisory program or platform.

Class Y shareholders who are eligible to purchase class A, class I (Putnam Mortgage Opportunities Fund only), class C, class N, class R3, class R4, class R5 or class R6 shares may exchange their class Y shares for class A, class I, class C, class N, class R3, class R4, class R5 or class R6 shares of the same fund, provided that such shares are offered to residents of the shareholder's state, in the case of class R3, class R4 and class R5 shares, the shares are available through the relevant retirement plan and, in the case of class R6 shares, the shares are available through the relevant retirement plan, advisory program or platform. Class Y shareholders should be aware that the financial institution or intermediary through which they hold class Y shares may have the authority under its account or similar agreement to exchange class Y shares for class A shares, class C shares or class N shares under certain circumstances, and none of the Putnam Funds, Franklin Distributors or Putnam Investor Services are responsible for any actions taken by a shareholder's financial institution or intermediary in this regard.

No sales charges or other charges will apply to any such exchange. For federal income tax purposes, a same-fund exchange is not expected to result in the realization by the investor of a capital gain or loss. Shareholders should be aware that (i) the same-fund exchange privilege may be effected only if permitted by a shareholder's dealer of record, (ii) the same-fund exchange privilege may not be available for all accounts and may not be offered by all dealers, financial institutions and other intermediaries through which a shareholder may hold shares, and (iii) the dealer of record through whom a shareholder holds shares may be authorized (e.g., under its account or similar agreement with a shareholder) to reject any same-fund exchange. None of the Putnam funds, Franklin Distributors or Putnam Investor Services are responsible for any determinations made, or any actions taken, by a shareholder's dealer of record in respect of same-fund exchanges. To exchange shares under the same-fund exchange privilege, please contact your investment dealer or Putnam Investor Services.

Dividends PLUS

For each fund other than Putnam Ultra Short MAC Series, shareholders may invest the fund's distributions of net investment income or distributions combining net investment income and short-term capital gains in shares of the same class of another continuously offered Putnam Fund (the "receiving fund") using the net asset value per share of the receiving fund determined on the date the fund's distribution is payable. No sales charge or CDSC will apply to the purchased shares. The prospectus of each fund describes its goal(s) and policies, and shareholders should obtain a prospectus and consider these goal(s) and policies carefully before investing their distributions in the receiving fund. Shares of certain Putnam Funds are not available to residents of all states.

Shareholders of other Putnam Funds may also use their distributions to purchase shares of the fund at net asset value.

For federal tax purposes, distributions from the fund which are reinvested in another fund are treated as paid by the fund to the shareholder and invested by the shareholder in the receiving fund and thus, to the extent composed of taxable income and deemed paid to a taxable shareholder, are taxable.

The Dividends PLUS program may be revised or terminated at any time.

Plans Available to Shareholders

The plans described below, which apply to each fund other than Putnam Ultra Short MAC Series, are fully voluntary and may be terminated at any time without the imposition by the fund or Putnam Investor Services of any penalty. All plans provide for automatic reinvestment of all distributions in additional shares of the fund at net asset value. The fund, Franklin Distributors or Putnam Investor Services may modify or cease offering these plans at any time.

Systematic Withdrawal Plan ("SWP"). An investor who owns or buys shares of the fund valued at $5,000 or more at the current offering price may open a SWP plan and have a designated sum of money ($50 or more) paid monthly, quarterly, semi-annually or annually to the investor or another person. Shares are deposited in a plan account, and all distributions are reinvested in additional shares of the fund at net asset value (except where the plan is utilized in connection with a charitable remainder trust). Shares in a plan account are then redeemed at net asset value to make each withdrawal payment. Payment will be made to any person the investor designates; however, if shares are registered in the name of a trustee or other fiduciary, payment will be made only to the fiduciary, except in the case of a profit-sharing or pension plan where payment will be made to a designee. As withdrawal payments may include a return of principal, they cannot be considered a guaranteed annuity or actual yield of income to the investor. The redemption of shares in connection with a plan generally will result in a gain or loss for tax purposes. Some or all of the losses realized upon redemption may be disallowed pursuant to the so-called wash sale rules if shares of the same fund from which shares were redeemed are purchased (including through the reinvestment of fund distributions) within a period beginning 30 days before, and ending 30 days after, such redemption. In such a case, the basis of the replacement shares will be increased to reflect the disallowed loss. Continued withdrawals in excess of income will reduce and possibly exhaust invested principal, especially in the event of a market decline. The cost of administering these plans for the benefit of those shareholders participating in them is borne by the fund as an expense of all shareholders. The fund, Franklin Distributors or Putnam Investor Services may terminate or change the terms of the plan at any time. A plan will be terminated if communications mailed to the shareholder are returned as undeliverable.

Investors should consider carefully with their own financial advisers whether the plan and the specified amounts to be withdrawn are appropriate in their circumstances. The fund and Putnam Investor Services make no recommendations or representations in this regard.

Tax-favored plans. (Not offered by funds investing primarily in Tax-exempt Securities.) Investors may purchase shares of the fund through the following Tax Qualified Retirement Plans, available to qualified individuals or organizations:

Standard and variable profit-sharing (including 401(k)) and money purchase pension plans; and Individual Retirement Account Plans (IRAs), including SIMPLE IRAs, Roth IRAs, SEP IRAs; and Coverdell Education savings plans.

Forms and further information on these Plans are available from investment dealers or from Franklin Distributors. In addition, plan administration arrangements are available on an optional basis; contact Putnam Investor Services at 1-866-207-7261.

Consultation with a competent financial and tax adviser regarding these Plans and consideration of the suitability of fund shares as an investment under the Employee Retirement Income Security Act of 1974, or otherwise, is recommended.

Automatic Rebalancing Arrangements. Franklin Distributors or Putnam Investor Services may enter into arrangements with certain dealers which provide for automatic periodic rebalancing of shareholders' accounts in Putnam Funds. For more information about these arrangements, please contact Franklin Distributors or Putnam Investor Services.

SIGNATURE GUARANTEES

Requests to redeem shares having a net asset value of $250,000 or more, or to transfer shares or make redemption proceeds payable to anyone other than the registered account owners, must be signed by all registered owners or their legal representatives and must be guaranteed by a bank, broker/dealer, municipal securities dealer or broker, credit union, national securities exchange, registered securities association, clearing agency, savings association or trust company, provided such institution is authorized and acceptable under and conforms with Putnam Investor Services' signature guarantee procedures. A copy of such procedures is available upon request. In certain situations, for example, if you want your redemption proceeds sent to an address other than your address as it appears on Putnam's records, you may also need to provide a signature guarantee. Putnam Investor Services usually requires additional documentation for the sale of shares by a corporation, partnership, agent or fiduciary, or a surviving joint owner. Contact Putnam Investor Services at 1-800-225-1581 for more information on Putnam's signature guarantee and documentation requirements.

REDEMPTIONS

Suspension of redemptions. The fund may not suspend shareholders' right of redemption, or postpone payment for more than seven days, unless the Exchange is closed for other than customary weekends or holidays, or if permitted by the rules of the SEC during periods when trading on the Exchange is restricted or during any emergency which makes it impracticable for the fund to dispose of its securities or to determine fairly the value of its net assets, or during any other period permitted by order of the Commission for protection of investors.

In-kind redemptions

For all retail equity funds, Putnam Convertible Securities Fund, Putnam Dynamic Asset Allocation Balanced Fund, Putnam Dynamic Asset Allocation Conservative Fund, Putnam Dynamic Asset Allocation Growth Fund and Putnam Multi-Asset Income Fund: To the extent consistent with applicable laws and regulations, the fund reserves the right to satisfy all or a portion of a redemption request by distributing securities or other property in lieu of cash ("in-kind" redemptions), except in the case of redemption requests by retail investors who hold shares of the fund through financial intermediaries. The fund will effect an in-kind redemption only when the fund determines it to be in the fund's best interest to do so, and in accordance with the fund's policies on in-kind redemptions. In-kind redemptions may benefit the fund and its shareholders by reducing the need to maintain significant cash balances or to sell securities held in the fund to meet redemption requests, or for other selling activities and, in so doing, may avoid or reduce cash drag, transaction costs and capital gain realization that could otherwise arise from reserves maintained or securities sold.

In some circumstances, the fund, in its discretion, may accept large purchase orders from one or more financial institutions that are willing, upon redemption of their investment, to receive redemption proceeds in-kind rather than in cash. The fund's ability to pay these redemption proceeds in-kind relieves it of the need to sell the securities that are distributed in-kind and allows it to

avoid the brokerage and other transaction costs associated with such sale. As with other in-kind redemptions, the fund would enter into these transactions only when it determines it to be in the fund's best interests to do so, and in accordance with the fund's policies covering in-kind redemptions.

With respect to any in-kind redemption, shareholders will receive either a pro rata basket or a custom basket of securities valued in the same manner as they are for purposes of determining the fund's net asset value. The custom basket includes only securities that have been disclosed in the fund's most recent public holdings disclosure.

The fund may provide a shareholder receiving redemption proceeds in-kind with information concerning the securities to be distributed. To the extent the redeeming shareholder receives information regarding a significant portion of the securities held by the fund, the redeeming shareholder may be required to agree to keep the information confidential, except to the extent necessary to dispose of the securities.

Any transaction costs or other expenses involved in liquidating securities received in an in-kind redemption will be borne by the redeeming investor. Also, there is a risk that in-kind redemptions could negatively impact the market value of the securities redeemed in-kind and, in turn, the net asset value of the fund.

For additional information regarding procedures for in-kind redemptions, please contact Franklin Distributors.

For all other funds. To the extent consistent with applicable laws and regulations, the fund will consider satisfying all or a portion of a redemption request by distributing securities or other property in lieu of cash ("in-kind" redemptions). Any transaction costs or other expenses involved in liquidating securities received in an in-kind redemption will be borne by the redeeming investor. For information regarding procedures for in-kind redemptions, please contact Franklin Distributors.

Global credit facility. Each fund other than the Putnam Sustainable Retirement Funds, the Putnam Retirement Advantage Funds and Putnam Short Term Investment Fund has available an unsecured revolving credit facility (the "Global Credit Facility") that may be used as an additional source of liquidity to fund redemptions of shares. There can be no assurance that the Global Credit Facility will remain available to the fund generally or that any available credit under the Global Credit Facility will be available to the fund when the fund seeks to draw on the Global Credit Facility.

During periods of deteriorating or stressed market conditions, when an increased portion of the fund's portfolio may be comprised of investments that have lower liquidity, or during extraordinary or emergency circumstances, the fund may be more likely to pay redemption proceeds with cash obtained through short-term borrowing arrangements (if available) or by giving you securities.

POLICY ON EXCESSIVE SHORT-TERM TRADING

As disclosed in the prospectus of each fund other than Putnam Money Market Fund, Putnam Government Money Market Fund, Putnam Ultra Short Duration Income Fund, Putnam Ultra Short MAC Series and Putnam Short Duration Bond Fund, the Investment Manager and the fund's Trustees have adopted policies and procedures intended to discourage excessive short-term trading. The Investment Manager's Compliance Department currently uses multiple reporting tools in an attempt to detect short-term trading activity occurring in shareholder accounts. The Investment Manager measures excessive short-term trading in the fund by the number of "round trip" transactions, as defined in the prospectus, within a specified period of time. If the Investment Manager's Compliance Department determines that an investor is engaging in excessive short-term trading, the Investment Manager will issue the investor and/or the investor's financial intermediary, if any, a written warning. To the extent that short-term trading activity continues, additional measures may be taken. The Investment Manager's practices for measuring excessive short-term trading activity and issuing warnings may change from time to time.

SHAREHOLDER LIABILITY

Under Massachusetts law, shareholders could, under certain circumstances, be held personally liable for the obligations of the fund. However, the Agreement and Declaration of Trust disclaims shareholder liability for acts or obligations of the fund and requires that notice of such disclaimer be given in each agreement, obligation, or instrument entered into or executed by the fund

or the Trustees. The Agreement and Declaration of Trust provides for indemnification out of fund property for all loss and expense of any shareholder held personally liable for the obligations of the fund. Thus, the risk of a shareholder incurring financial loss on account of shareholder liability is limited to circumstances in which the fund would be unable to meet its obligations. The likelihood of such circumstances appears to be remote.

DERIVATIVE ACTIONS

The Agreement and Declaration of Trust provides a detailed process for the bringing of derivative actions by shareholders. Prior to bringing or maintaining any court action, proceeding or claim on behalf of a fund, a shareholder must first make a demand on the Trustees requesting the Trustees to bring or maintain such action, proceeding or claim. Such demand shall be mailed to the Clerk of the Trust at the Trust's principal office and shall set forth in reasonable detail the nature of the proposed court action, proceeding or claim and the essential facts relied upon by the shareholder to support the allegations made in the demand. The Trustees may determine whether the bringing or maintenance of any such action, proceeding or claim is in the best interests of the fund or, alternatively in their sole discretion, may submit the matter to a vote of fund shareholders. Any such determination made by the Trustees in good faith shall be binding on all fund shareholders. The foregoing is intended only as a summary and is qualified in its entirety by reference to the full text of the Agreement and Declaration of Trust, which is on file with the SEC.

DISCLOSURE OF PORTFOLIO INFORMATION

The Trustees have adopted policies with respect to the disclosure of the fund's portfolio holdings by the fund, the Investment Manager, or their affiliates. These policies provide that information about the fund's portfolio generally may not be released to any party prior to (i) the day after the posting of such information on franklintempleton.com, (ii) the filing of the information with the SEC in a required filing, or (iii) the dissemination of such information to all shareholders simultaneously. Certain limited exceptions pursuant to the fund's policies are described below. In addition, these policies do not apply to the sharing of fund portfolio holdings information with investment personnel involved in the management of other funds that invest in such fund and that are managed by the Investment Manager or its affiliates. The Trustees will periodically receive reports from the fund's Chief Compliance Officer regarding the operation of these policies and procedures, including any arrangements to make non-public disclosures of the fund's portfolio information to third parties. The Investment Manager and its affiliates are not permitted to receive compensation or other consideration in connection with disclosing information about the fund's portfolio holdings to third parties.

Public Disclosures

The fund's portfolio holdings are currently disclosed to the public through filings with the SEC and postings on franklintempleton.com. The fund files its portfolio holdings with the SEC twice each year on Form N-CSR (with respect to each annual period and semi-annual period). In addition, money market funds file reports of portfolio holdings on Form N-MFP each month (with respect to the prior month), and funds other than money market funds file reports of portfolio holdings on Form N-PORT 60 days after each fiscal quarter (for the respective fiscal quarter), with the schedule of portfolio holdings filed on Form N-PORT for the third month of the first and third fiscal quarter made publicly available. Shareholders may obtain the Form N-CSR and N-MFP filings and the publicly available portions of Form N-PORT filings on the SEC's website at http://www.sec.gov. Form N-CSR filings are available upon filing, Form N-MFP filings are available 60 days after each calendar month end, and information reported on Form N-PORT filings for the third month of a fiscal quarter is available 60 days after the end of the fiscal quarter. You may call the SEC at 1-800-SEC-0330 for information about the SEC's website.

For Putnam Money Market Fund and Putnam Government Money Market Fund, the following information is publicly available at franklintempleton.com, as disclosed in the following table. This information will remain available on the website for six months thereafter, after which the information can be found on the SEC's website at http://www.sec.gov.

Information	Frequency of Disclosure	Date of Web Posting

Full Portfolio Holdings	Monthly	No later than 5 business days after the end of each month.
Top 10 Portfolio Holdings and Other Portfolio Statistics	Monthly	Beginning on or after 5 business days after the end of each month.

For Putnam Mortgage Opportunities Fund, the Investment Manager makes the fund's portfolio information publicly available at franklintempleton.com, as disclosed in the following table.

Information	Frequency of Disclosure	Date of Web Posting
Full Portfolio Holdings	Monthly	On or before 15 calendar days after the end of each month.
Top 10 Portfolio Holdings and Other Portfolio Statistics	Monthly	Beginning on or after 5 business days after the end of each month.

For Putnam Ultra Short Duration Income Fund and Putnam Ultra Short MAC Series, the Investment Manager makes the fund's portfolio information publicly available at franklintempleton.com, as disclosed in the following table.

Information	Frequency of Disclosure	Date of Web Posting
Full Portfolio Holdings	Monthly	On or after 5 business days after the end of each month.
Top 10 Portfolio Holdings and Other Portfolio Statistics	Monthly	Beginning on or after 5 business days after the end of each month.

For all other funds, the Investment Manager makes each fund's portfolio information publicly available at franklintempleton.com, as disclosed in the following table.

Information (1)	Frequency of Disclosure	Date of Web Posting
Full Portfolio Holdings	Monthly	On or before 15 calendar days after the end of each month.
Top 10 Portfolio Holdings and Other Portfolio Statistics	Monthly	Beginning on or after 5 business days after the end of each month.

(1) Putnam mutual funds that are not currently offered to the general public (such as Putnam Short Term Investment Fund, Putnam Dynamic Asset Allocation Equity Fund, and Putnam Multi-Asset Income Fund) do not post portfolio holdings on the Putnam Investments website, except to the extent required by applicable regulations. The Putnam Retirement Advantage Funds and Putnam Sustainable Retirement Funds invest solely in other funds managed by the Investment Manager or its affiliates. Please see these funds' prospectuses for their target allocations.

The scope of the information relating to the fund's portfolio that is made available on the website may change from time to time without notice. In addition, the posting of fund holdings may be delayed in some instances for technical reasons.

The Investment Manager or its affiliates may include fund portfolio information that has already been made public through a Web posting or SEC filing in marketing literature and other communications to shareholders, advisors or other parties, provided that, in the case of information made public through the Web, the information is disclosed no earlier than the day after the date of posting to the website.

Other Disclosures

In order to address potential conflicts between the interest of fund shareholders, on the one hand, and those of the Investment Manager, Franklin Distributors or any affiliated person of those entities or of the fund, on the other hand, the fund's policies require that non-public disclosures of information regarding the fund's portfolio may be made only if there is a legitimate business purpose consistent with fiduciary duties to all shareholders of the fund. In addition, the party receiving the non-public information must sign a non-disclosure agreement unless otherwise approved by the Chief Compliance Officer of the fund. Arrangements to make non-public disclosures of the fund's portfolio information must be approved by the Chief Compliance Officer of the fund. The Chief Compliance Officer will report on an ongoing basis to a committee of the fund's Board of Trustees consisting only of Trustees who are not "interested persons" of the fund or the Investment Manager regarding any such arrangement that the fund may enter into with third parties other than service providers to the fund.

The fund periodically discloses its portfolio information on a confidential basis to various service providers that require such information in order to assist the fund with its day-to-day business affairs. In addition to the Investment Manager and its affiliates, including Putnam Investor Services and Franklin Distributors, these service providers include the fund's custodian (JPMorgan) and any sub-custodians (including one or more sub-custodians for each non-U.S. market in which the fund purchases securities), accounting providers (JPMorgan, SS&C Advent, and BNY Mellon), pricing services (including IDC, Reuters, Markit, Statpro, Standard & Poors, Bloomberg, ICE ClearCredit, LCH Swapclear, PriceServ and CME Group), legal counsel (Ropes & Gray LLP and, for funds sold in Japan, Mori Hamada & Matsumoto), financial printer and filing agent (Newsfile Corp.), proxy voting service Institutional Investor Services, Inc. and Glass, Lewis & Co. LLC, compliance limit monitoring (Consensys Limited, FinDox) and securities lending agent (Goldman Sachs Bank USA). These service providers are required to keep such information confidential, and are prohibited from trading based on the information or otherwise using the information except as necessary in providing services to the fund.

The fund may also periodically provide non-public information about its portfolio holdings to rating and ranking organizations and other providers of industry data, such as Lipper Inc., Morningstar Inc., Bloomberg and Thomson Reuters, in connection with those firms' research on and classification of the fund and in order to gather information about how the fund's attributes (such as volatility, turnover, and expenses) compare with those of peer funds. The fund may also periodically provide non-public information about its portfolio holdings to consultants that provide portfolio analysis services or other investment research or trading analytics. Such recipients of portfolio holdings include Barclays, FactSet, ITG, Trade Informatics, ConsenSys, ENSO Financial Analytics, Bloomberg and Credit Suisse. Any such rating, ranking, or consulting or other firm would be required to keep the fund's portfolio information confidential and would be prohibited from trading based on the information or otherwise using the information except as necessary in providing services to the fund. Such firms may receive portfolio holdings information only from certain funds (such as equity funds or fixed income funds) and such information may be provided in greater or lesser detail depending on the nature of the services provided by the relevant firm.

In addition, the Investment Manager offers model separately managed account portfolios to sponsoring broker-dealers ("Program Sponsors") that in turn offer those portfolios to their customers. The Investment Manager also provides investment advisory services to retail separately managed account clients through managed account programs sponsored by broker-dealers and other financial intermediaries (together, "SMAs"). The SMA portfolios may follow investment programs that are similar or identical in material respects to those of specific Putnam funds or other client accounts and, as a result, there may be substantial overlap between the securities holdings and transactions of an SMA portfolio and those of any similarly managed funds or accounts. If

such model portfolios are substantially similar to those of a U.S. registered fund, such model portfolios may be provided to Program Sponsors so long as: (1) the recipient Program Sponsors has executed a non-disclosure agreement or other agreement containing or incorporating confidentiality provisions that restrict the use and dissemination of confidential portfolio holdings information received by the Program Sponsor as described in the following sentence, or other provisions that impose similar restrictions on such use and dissemination and, (2) the SMA portfolio has been deemed sufficiently liquid by the Investment Manager's liquidity committee or the Investment Manager, as determined in their reasonable judgment. Such agreement must provide that the Program Sponsor agrees that: (1) it is subject to a duty of confidentiality; (2) it will use confidential model portfolio information only to the extent necessary to perform its obligations under the agreement; and (3) it will not disclose confidential model portfolio information except to personnel or parties who have a need to know such confidential information in connection with, or in order to fulfill the purposes contemplated by, the agreement.

INFORMATION SECURITY RISKS

Cyber security risk. With the increased use of interconnected technologies such as the Internet and the dependence on computer systems to perform necessary business functions, investment companies such as the fund and its service providers may be prone to operational, information security and related risks resulting from third-party cyber-attacks and/or other technological malfunctions. Cyber-attacks may include stealing or corrupting data maintained online or digitally, preventing legitimate users from accessing information or services on a website, releasing confidential information without authorization, and causing operational disruption. Successful cyber-attacks against, or security or technology breakdowns of, the fund or its adviser, custodian, transfer agent, or other affiliated or third-party service providers may adversely affect the fund and its shareholders. For example, cyber-attacks may interfere with the processing of shareholder transactions, impact the fund's ability to calculate its net asset value, cause the release of private shareholder information or confidential fund information, impede trading, cause reputational damage, and subject the fund or others to regulatory fines, penalties or financial losses, reimbursement or other compensation costs, and additional compliance costs. Similar types of cyber security risks also are present for issuers of securities in which the fund invests, which could result in material adverse consequences for such issuers, and may cause the fund's investment in such securities to lose value. The fund and the Investment Manager or sub-adviser (as applicable) may have limited ability to prevent or mitigate cyber-attacks or security or technology breakdowns affecting the fund's third-party service providers. While the Investment Manager and sub-adviser (as applicable) have established business continuity plans and systems designed to prevent or reduce the impact of cyber-attacks, such plans and systems are subject to inherent limitations.

PROXY VOTING GUIDELINES AND PROCEDURES

The Board of Trustees have delegated proxy voting authority for the securities held in the funds' portfolios to Putnam Management and have approved Putnam Management's current proxy voting guidelines and procedures. Putnam Management retained an independent proxy voting service to assist in vote analysis, implementation, recordkeeping and reporting services. The proxy voting guidelines summarize Putnam Management's positions on various issues of concern to investors and provide direction to the proxy voting service as to how fund portfolio securities should be voted on proposals dealing with particular issues. The proxy voting procedures explain the role of Putnam Management personnel and the proxy voting service in the proxy voting process, describe the procedures for referring matters involving investment considerations to the investment personnel of Putnam Management, and describe the procedures for handling potential conflicts of interest. Putnam Management's proxy voting guidelines and procedures are included in this SAI as Appendix A. The Trustees will review the funds' proxy voting from time to time and will review annually Putnam Management's proxy voting guidelines and procedures. Information regarding how the funds' proxies relating to portfolio securities were voted during the 12-month period ended June 30, 2024 is available on www.franklintempleton.com, and on the SEC's website at www.sec.gov. If you have questions about finding forms on the SEC's website, you may call the SEC at 1-800-SEC-0330. You may also obtain Putnam Management's proxy voting guidelines and procedures by calling Putnam's Shareholder Services at 1-800-225-1581.

VOTING PROXIES OF UNDERLYING FUNDS OF A FUND OF FUNDS

When a Putnam Fund (a "fund-of-funds") invests in an underlying fund overseen by the Board of Trustees (an "underlying fund"), the fund-of-funds will generally vote any proxies of the underlying fund in a manner consistent with the recommendation of Putnam Management. A fund-of-funds does not intend to vote proxies of the underlying fund in the same proportion as all other

voting shareholders of the underlying fund (this is known as "echo voting") or to "pass-through" proxy voting to the fund-of-funds' shareholders unless otherwise required by applicable law or regulations.

SECURITIES RATINGS

The ratings of securities in which the fund may invest will be measured at the time of purchase and, to the extent a security is assigned a different rating by one or more of the various rating agencies, the Investment Manager may use the highest rating assigned by any agency. The Investment Manager will not necessarily sell an investment if its rating is reduced. Below are descriptions of ratings, as provided by the rating agencies, which represent opinions as to the quality of various debt instruments.

Moody's Investors Service, Inc.

Global Long-Term Rating Scale (original maturity of 1 year or more)

Aaa – Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.

Aa – Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A – Obligations rated A are judged to be upper-medium grade and are subject to low credit risk.

Baa – Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

Ba – Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.

B – Obligations rated B are considered speculative and are subject to high credit risk.

Caa – Obligations rated Caa are judged to be speculative of poor standing and are subject to very high credit risk.

Ca – Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.

C – Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest.

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. Additionally, a "(hyb)" indicator is appended to all ratings of hybrid securities issued by banks, insurers, finance companies, and securities firms.

By their terms, hybrid securities allow for the omission of scheduled dividends, interest, or principal payments, which can potentially result in impairment if such an omission occurs. Hybrid securities may also be subject to contractually allowable write-downs of principal that could result in impairment. Together with the hybrid indicator, the long-term obligation rating assigned to a hybrid security is an expression of the relative credit risk associated with that security.

Global Short-Term Rating Scale (original maturity of 13 months or less)

P-1 – Issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations.

P-2 – Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.

P-3 – Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.

NP – Issuers (or supporting institutions) rated Not Prime do not fall within any of the Prime rating categories.

US Municipal Short-Term Obligation Ratings

MIG 1 – This designation denotes superior credit quality. Excellent protection is afforded by established cash flows, highly reliable liquidity support, or demonstrated broad-based access to the market for refinancing.

MIG 2 – This designation denotes strong credit quality. Margins of protection are ample, although not as large as in the preceding group.

MIG 3 – This designation denotes acceptable credit quality. Liquidity and cash-flow protection may be narrow, and market access for refinancing is likely to be less well-established.

SG – This designation denotes speculative grade credit quality. Debt instruments in this category may lack sufficient margins of protection.

US Municipal Demand Obligation Ratings

VMIG 1 – This designation denotes superior credit quality. Excellent protection is afforded by the superior short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.

VMIG 2 – This designation denotes strong credit quality. Good protection is afforded by the strong short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.

VMIG 3 – This designation denotes acceptable credit quality. Adequate protection is afforded by the satisfactory short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.

SG – This designation denotes speculative-grade credit quality. Demand features rated in this category may be supported by a liquidity provider that does not have an investment grade short-term rating or may lack the structural and/or legal protections necessary to ensure the timely payment of purchase price upon demand.

Standard & Poor's

Long-Term Issue Credit Ratings (original maturity of one year or more)

AAA – An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

AA – An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.

A – An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

BBB – An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

BB; B; CCC; CC and **C** – Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the lowest degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

BB – An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

B – An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.

CCC – An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.

CC – An obligation rated 'CC' is currently highly vulnerable to nonpayment. The 'CC' rating is used when a default has not yet occurred, but Standard & Poor's expects default to be a virtual certainty, regardless of the anticipated time to default.

C – An obligation rated 'C' is currently highly vulnerable to nonpayment, and the obligation is expected to have lower relative seniority or lower ultimate recovery compared to obligations that are rated higher.

D – An obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the date due, unless Standard & Poor's believes that such payments will be made within five business days in the absence of a stated grace period or within the earlier of the stated grace period or 30 calendar days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to 'D' if it is subject to a distressed exchange offer.

NR – This indicates that no rating has been requested, or that there is insufficient information on which to base a rating, or that Standard & Poor's does not rate a particular obligation as a matter of policy.

Note: The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

Short-Term Issue Credit Ratings (original maturity of 365 days or less)

A-1 – A short-term obligation rated'A-1' is rated in the highest category by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.

A-2 – A short-term obligation rated 'A-2' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment on the obligation is satisfactory.

A-3 – A short-term obligation rated 'A-3' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

B – A short-term obligation rated 'B' is regarded as vulnerable and has significant speculative characteristics. The obligor currently has the capacity to meet its financial commitments; however, it faces major ongoing uncertainties which could lead to the obligor's inadequate capacity to meet its financial commitments.

C – A short-term obligation rated 'C' is currently vulnerable to nonpayment and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.

D – A short-term obligation rated 'D' is in default or in breach of an imputed promise. For non-hybrid capital instruments, the 'D' rating category is used when payments on an obligation are not made on the due date, unless Standard & Poor's believes that such payments will be made within any stated grace period. However, any stated grace period longer than five business days will be treated as five business days. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of a similar action and where default on an obligation is a virtual certainty, for example due to automatic stay provisions. An obligation's rating is lowered to 'D' if it is subject to a distressed exchange offer.

Municipal Short-Term Note Ratings (original maturity of 3 years or less)

SP-1 – Strong capacity to pay principal and interest. An issue determined to possess a very strong capacity to pay debt service is given a plus (+) designation.

SP-2 – Satisfactory capacity to pay principal and interest, with some vulnerability to adverse financial and economic changes over the term of the notes.

SP-3 – Speculative capacity to pay principal and interest.

Fitch Ratings

Long-Term Rating Scales

AAA – Highest credit quality. 'AAA' ratings denote the lowest expectation of default risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.

AA – Very high credit quality. 'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.

A – High credit quality. 'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.

BBB – Good credit quality. 'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.

BB – Speculative. 'BB' ratings indicate an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial flexibility exists which supports the servicing of financial commitments.

B – Highly speculative. 'B' ratings indicate that material default risk is present, but a limited margin of safety remains. Financial commitments are currently being met; however, capacity for continued payment is vulnerable to deterioration in the business and economic environment.

CCC – Substantial credit risk. Default is a real possibility.

CC – Very high levels of credit risk. Default of some kind appears probable.

C – Exceptionally high levels of credit risk. Default is imminent or inevitable, or the issuer is in standstill. Conditions that are indicative of a 'C' category rating for an issuer include:

a. the issuer has entered into a grace or cure period following non-payment of a material financial obligation;

b. the issuer has entered into a temporary negotiated waiver or standstill agreement following a payment default on a material financial obligation; or

c. Fitch Ratings otherwise believes a condition of 'RD' or 'D' to be imminent or inevitable, including through the formal announcement of a distressed debt exchange.

RD – Restricted default. 'RD' ratings indicate an issuer that in Fitch Ratings' opinion has experienced an uncured payment default on a bond, loan or other material financial obligation but which has not entered into bankruptcy filings, administration,

receivership, liquidation or other formal winding-up procedure, and which has not otherwise ceased operating. This would include:

a. the selective payment default on a specific class or currency of debt;

b. the uncured expiry of any applicable grace period, cure period or default forbearance period following a payment default on a bank loan, capital markets security or other material financial obligation;

c. the extension of multiple waivers or forbearance periods upon a payment default on one or more material financial obligations, either in series or in parallel; or

d. execution of a distressed debt exchange on one or more material financial obligations.

D – Default. 'D' ratings indicate an issuer that in Fitch Ratings' opinion has entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedure, or which has otherwise ceased business.

Default ratings are not assigned prospectively to entities or their obligations; within this context, non-payment on an instrument that contains a deferral feature or grace period will generally not be considered a default until after the expiration of the deferral or grace period, unless a default is otherwise driven by bankruptcy or other similar circumstance, or by a distressed debt exchange.

"Imminent" default typically refers to the occasion where a payment default has been intimated by the issuer, and is all but inevitable. This may, for example, be where an issuer has missed a scheduled payment, but (as is typical) has a grace period during which it may cure the payment default. Another alternative would be where an issuer has formally announced a distressed debt exchange, but the date of the exchange still lies several days or weeks in the immediate future.

In all cases, the assignment of a default rating reflects the agency's opinion as to the most appropriate rating category consistent with the rest of its universe of ratings, and may differ from the definition of default under the terms of an issuer's financial obligations or local commercial practice.

Note: The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the 'AAA' Long-Term Issuer Default Rating (IDR) category, or to Long-Term IDR categories below 'B'.

Short-Term Ratings

F1 – Highest short-term credit quality. Indicates the strongest intrinsic capacity for timely payment of financial commitments; may have an added "+" to denote any exceptionally strong credit feature.

F2 – Good short-term credit quality. Good intrinsic capacity for timely payment of financial commitments.

F3 – Fair short-term credit quality. The intrinsic capacity for timely payment of financial commitments is adequate.

B – Speculative short-term credit quality. Minimal capacity for timely payment of financial commitments, plus heightened vulnerability to near term adverse changes in financial and economic conditions.

C – High short-term default risk. Default is a real possibility.

RD – Restricted default. Indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations, typically applicable to entity ratings only.

D – Default. Indicates a broad-based default event for an entity, or the default of a short-term obligation.

Appendix A

Putnam Investments

Proxy Voting Procedures

Introduction and Summary

Many of Putnam's investment management clients have delegated to Putnam the authority to vote proxies for shares in the client accounts Putnam manages. Putnam believes that the voting of proxies can be an important tool for institutional investors to promote best practices in corporate governance and votes all proxies in the best interests of its clients as investors. In Putnam's view, strong corporate governance policies, most notably oversight by an independent board of qualified directors, best serve investors' interests. Putnam will vote proxies and maintain records of voting of shares for which Putnam has proxy voting authority in accordance with its fiduciary obligations and applicable law.

Putnam's voting policies are rooted in our views that (1) strong, independent corporate governance is important to long-term company financial performance, and (2) long-term investors' active engagement with company management, including through the proxy voting process, strengthens issuer accountability and overall market discipline, potentially reducing risk and improving returns over time. Our voting program is offered as a part of our investment management services, at no incremental fee to Putnam, and, while there can be no guarantees, it is intended to offer potential investment benefits over a long-term horizon. Our voting policies are designed with investment considerations in mind, not as a means to pursue particular political, social, or other goals. As a result, we may not support certain proposals whose costs to the issuer (including implementation costs, practicability, and other factors), in Putnam's view, outweigh their investment merits.

This memorandum sets forth Putnam's policies for voting proxies. It covers all accounts for which Putnam has proxy voting authority. These accounts include the Putnam Mutual Funds[1] and Putnam Exchange-Traded Funds, US and international institutional accounts and funds managed or sub-advised by The Putnam Advisory Company, LLC and Putnam Fiduciary Trust Company, LLC. In addition, the policies include US mutual funds and other accounts sub-advised by Putnam Investment Management, LLC.[2]

Proxy Committee

Putnam has a Proxy Committee composed of senior professionals, including from the Putnam Equity investment team and the Putnam Equity Sustainability Strategy group. The Chief Investment Officer of Putnam Equity appoints the members of the Proxy Committee. The Proxy Committee is responsible for setting general policy as to proxies. Specifically, the Committee:

1. Reviews these procedures and the Proxy Voting Guidelines annually and approves any amendments considered to be advisable.

2. Considers special proxy issues as they may from time to time arise.

[1] Effective January 27, 2023, the Board of Trustees of the Putnam Mutual Funds delegated proxy voting authority to Putnam Investment Management, LLC, the investment manager to the Putnam Mutual Funds.

[2] The Putnam Proxy Voting Procedures and Guidelines will apply also to certain funds and institutional and other accounts managed by Franklin Advisers, Inc. ("FAV") but formerly managed or sub-advised by one of the Putnam adviser entities identified above, pursuant to sub-advisory agreements in effect from time to time between FAV and the relevant Putnam entity(ies).

3. Must approve all vote overrides recommended by investment professionals.

Proxy Voting Administration

The Putnam Sustainability Strategy group administers Putnam's proxy voting through a Proxy Voting Team. The Proxy Voting Team has the following duties:

1. Annually prepares the Proxy Voting Guidelines and distributes them to the Proxy Committee for review.

2. Coordinates the Proxy Committee's review of any new or unusual proxy issues and serves as Secretary thereto.

3. Manages the process of referring issues to portfolio managers for voting instructions.

4. Oversees the work of any third-party vendor hired to process proxy votes (as of the date of these procedures Putnam has engaged Institutional Shareholder Services (ISS) to process proxy votes) and the process of setting up the voting process with ISS and custodial banks for new clients.

5. Coordinates responses to investment professionals' questions on proxy issues and proxy policies, including forwarding specialized proxy research from ISS and other vendors and forwards information to investment professionals prepared by other areas at Putnam.

6. Implements the exception process with respect to referred items on securities held solely in accounts managed by the Global Asset Allocation ("GAA") team within Franklin Templeton Investment Solutions described in more detail in the Proxy Referral section below.

7. Maintains required records of proxy votes on behalf of the appropriate Putnam client accounts.

8. Prepares and distributes reports required by Putnam clients.

Proxy Voting Guidelines

Putnam maintains written voting guidelines ("Guidelines") setting forth voting positions determined by the Proxy Committee on those issues believed most likely to arise day to day. The Guidelines may call for votes to be cast normally in favor of or opposed to a matter or may deem the matter an item to be referred to investment professionals on a case-by-case basis. A copy of the Guidelines is attached to this memorandum as Exhibit A.

In light of our views on the importance of issuer governance and investor engagement, which we believe are applicable across our various strategies and clients, regardless of a specific portfolio's investment objective, Putnam will vote all proxies in accordance with the Guidelines, subject to two exceptions as follows:

1. If the portfolio managers of client accounts holding the stock of a company with a proxy vote believe that following the Guidelines in any specific case would not be in the clients' best interests, they may request the Proxy Voting Team not to follow the guidelines in such case. The request must be in writing and include an explanation of the rationale for doing so. The Proxy Voting Team will review any such request with the Proxy Committee (or, in cases with limited time, with the Chair of the Proxy Committee acting on the Proxy Committee's behalf) prior to implementing the request.

2. Putnam may accept instructions to vote proxies under client specific guidelines subject to review and acceptance by the Investment Division and the Legal and Compliance Department.

Other

1. Putnam may elect not to vote when the security is no longer held.

2. Putnam will **abstain** on items that require case-by-case review when a vote recommendation from the appropriate investment professional(s) cannot be obtained due to restrictive voting deadlines or other prohibitive operational or administrative requirements.

3. Where securities held in Putnam client accounts, including the Putnam mutual funds, have been loaned to third parties in connection with a securities lending program administered by Putnam (through securities lending agents overseen by Putnam), Putnam has instructed lending agents to recall U.S. securities on loan to vote proxies, in accordance with Putnam's securities lending procedures. Due to differences in non-U.S. markets, Putnam does not currently seek to recall non-U.S. securities on loan. In addition, where Putnam does not administer a client's securities lending program, this recall policy does not apply, since Putnam generally does not have information on loan details or authority to effect recalls in those cases. It is possible that, for impracticability or other reasons, a recalled security may not be returned to the relevant custodian in time to allow Putnam to vote the relevant proxy.

4. Putnam will make its reasonable best efforts to vote all proxies except when impeded by circumstances that are reasonably beyond its control and responsibility, such as custodial proxy voting services, in part or whole, not available or not established by a client, or custodial error.

Proxy Voting Referrals

Under the Guidelines, certain proxy matters will be referred to Portfolio Managers. The Portfolio Manager receiving the referral request may delegate the vote decision to an appropriate Analyst from among a list of eligible analysts (such list to be approved by the Chief Investment Officer of the Putnam Equity group and the Director of Equity Research for the Putnam Equity group). The Analyst will be required to make the affirmation and disclosures identified in (3) below. Normally specific referral items will be referred to the portfolio team leader (or another member of the portfolio team he or she designates) whose accounts hold the greatest number of shares of the issuer of the proxies through the Proxy Referral Administration Database. The referral request contains (1) a field that will be used by the portfolio team leader or member for recommending a vote on each referral item, (2) a field for describing any contacts relating to the proxy referral item the portfolio team may have had with any Franklin Templeton employee outside Putnam Equity or with any person other than a proxy solicitor acting in the normal course of proxy solicitation, and (3) a field for portfolio managers to affirm that they are making vote recommendations in the best interest of client accounts and have disclosed to Compliance any potential conflicts of interest relevant to their vote recommendation.

Putnam may vote any referred items on securities held solely in accounts managed by the GAA team within Franklin Templeton Investment Solutions (and not held by any other investment product team) in accordance with the recommendation of Putnam's third-party proxy voting service provider. The Proxy Voting Team will first give the relevant portfolio manager(s) on the GAA team the opportunity to review the referred items and vote on them. If the portfolio manager(s) on the GAA team do not decide to make any active voting decision on any of the referred items, the items will be voted in accordance with the service provider's recommendation. If the security is also held by other investment teams at Putnam Equity, the items will be referred to the largest holder who is not a member of the GAA team.

The portfolio team leader or members who have been requested to provide a recommendation on a proxy referral item will complete the referral request. Upon receiving each completed referral request from the applicable Portfolio Manager or Analyst, the Proxy Voting Team will review the completed request for accuracy and completeness, and will follow up with investment personnel as appropriate.

Conflicts of Interest

A potential conflict of interest may arise when voting proxies of an issuer which has a significant business relationship with Putnam. For example, Putnam could manage a defined benefit or defined contribution pension plan for the issuer. Putnam's policy is to vote proxies based solely on the investment merits of the proposal. In order to guard against conflicts, the following procedures have been adopted:

1. The Proxy Committee is composed of senior professionals, including Portfolio Managers in Putnam Equity and the Putnam Equity Sustainability Strategy group. None of these individuals or groups reports to Franklin Templeton's marketing businesses.

2. No Franklin Templeton employee outside Putnam Equity may contact any portfolio manager about any proxy vote without first contacting the Proxy Voting Team or a senior lawyer in the Legal and Compliance Department. There is no prohibition on employees seeking to communicate investment-related information to investment professionals except for Putnam's restrictions on dissemination of material, non-public information. However, the Proxy Voting Team will coordinate the delivery of such information to investment professionals to avoid appearances of conflict.

3. Investment professionals responding to referral requests must disclose any contacts with third parties other than normal contact with proxy solicitation firms and must affirm that they are making vote recommendations in the best interest of client accounts and have disclosed to the Proxy Voting Team any potential conflicts of interest relevant to their vote recommendation.

4. The Proxy Voting Team will review the name of the issuer of each proxy that contains a referral item against various sources of Putnam business relationships maintained by the Legal and Compliance Department or Client Service for potential material business relationships (i.e., conflicts of interest). For referrals, the Proxy Voting Team will complete the Proxy Voting Conflict of Interest Disclosure Form (attached as Exhibit B and C) via the Proxy Referral Administration Database and will prepare a quarterly report for the Putnam Chief Compliance Officer identifying all completed Conflict of Interest Disclosure forms.

5. Putnam's Proxy Voting Guidelines may only be overridden with the written recommendation from a member of the Investment Division and concurrence of the Proxy Committee (or, in cases with limited time, with the Chair of the Proxy Committee on the Proxy Committee's behalf).

Recordkeeping

The Putnam Equity Sustainability Strategy Group will retain copies of the following books and records:

1. A copy of the Proxy Voting Procedures and Guidelines as are from time to time in effect;

2. A copy of each proxy statement received with respect to securities in client accounts;

3. Records of each vote cast for each client;

4. Internal documents generated in connection with a proxy referral, such as emails, memoranda, etc.

5. Written reports to clients on proxy voting and all client requests for information and Putnam's response.

All records will be maintained for seven years. A proxy vendor may on Putnam's behalf maintain the records noted in 2 and 3 above if it commits to providing copies promptly upon request.

Putnam Investments Proxy Voting Guidelines

The proxy voting guidelines below summarize Putnam's positions on various issues of concern to investors and indicate how client portfolio securities will be voted on proposals dealing with a particular issue. The proxy voting service is instructed to vote all proxies relating to client portfolio securities in accordance with these guidelines, except as otherwise instructed by the Proxy Voting Team.

Putnam's voting policies are rooted in our views that (1) strong, independent corporate governance is important to long-term company financial performance, and (2) long-term investors' active engagement with company management, including through the proxy voting process, strengthens issuer accountability and overall market discipline, potentially reducing risk and improving returns over time. Our voting program is offered as a part of our investment management services, at no incremental fee to Putnam, and, while there can be no guarantees, it is intended to offer potential investment benefits over a long-term horizon. Our voting policies are designed with investment considerations in mind, not as a means to pursue particular political, social, or other goals. As a result, we may not support certain proposals whose costs to the issuer (including implementation costs, practicability, and other factors), in Putnam's view, outweigh their investment merits.

These proxy voting policies are intended to be decision-making guidelines. The guidelines are not exhaustive and do not include all potential voting issues. In addition, as contemplated by and subject to Putnam's Proxy Voting Procedures, because proxy issues and the circumstances of individual companies are so varied, portfolio teams may recommend votes that may vary from the general policy choices set forth in the guidelines.

The following guidelines are grouped according to the types of proposals generally presented to shareholders. Part I deals with proposals which have been approved and recommended by a company's board of directors. Part II deals with proposals submitted by shareholders for inclusion in proxy statements. Part III addresses unique considerations pertaining to non-US issuers.

I. Board-Approved Proposals

Proxies will be voted **for** board-approved proposals, except as follows:

A. Matters Relating to the Board of Directors

Uncontested Election of Directors

The board of directors has the important role of overseeing management and its performance on behalf of shareholders. When evaluating a company's board, Putnam may consider the diversity of professional backgrounds and personal characteristics. Putnam believes that companies generally benefit from diversity on the board, including diversity with respect to gender, ethnicity, race, skills, perspectives and experience.

Proxies will be voted **for** the election of the company's nominees for directors (and/or subsidiary directors) and **for** board-approved proposals on other matters relating to the board of directors (provided that such nominees and other matters have been approved by an independent nominating committee), except as follows:

- Putnam will **withhold votes** from the entire board of directors if:

- The board does not have a majority of independent directors,

- The board does not have nominating, audit and compensation committees composed solely of independent directors, or

- The board has more than 15 members or fewer than five members, absent special circumstances.

- Putnam may refrain from withholding votes from the board due to insufficient key committee independence due to director resignation, change in board structure, or other specific circumstances, provided that the company has stated (for example in an 8-K), or it can otherwise be determined, that the board will address committee composition to ensure compliance with the applicable corporate governance code in a timely manner after the shareholder meeting and the company has a history of appropriate board independence.

Unless otherwise indicated, for the purposes of determining whether a board has a majority of independent directors and independent nominating, audit, and compensation committees, an independent director is a director who (1) meets all requirements to serve as an independent director of a company under the final NYSE Corporate Governance Rules (e.g., no material business relationships with the company and no present or recent employment relationship with the company (including employment of an immediate family member as an executive officer)), and (2) has not accepted directly or indirectly any consulting, advisory, or other compensatory fee (excluding immaterial fees for transactional services as defined by the NYSE Corporate Governance rules) from the company other than in his or her capacity as a member of the board of directors or any board committee. Putnam believes that the receipt of such compensation for services other than service as a director raises significant independence issues.

- Putnam will **withhold votes** from any nominee for director who is considered an independent director by the company and who has received compensation within the last three years from the company for the provision of professional services (e.g., investment banking, consulting, legal or financial advisory fees).

- Putnam will **withhold votes** from any nominee for director who attends fewer than 75% of board and committee meetings. Putnam may refrain from withholding votes on a **case-by-case** basis if a valid reason for the absence exists, such as illness, personal emergency, potential conflict of interest, etc.

- Putnam will **withhold votes** from any incumbent nominee for director who served on a board that has not acted to implement a policy requested in a shareholder proposal that received the support of a majority of the votes actually cast on the matter at its previous two annual meetings, or

- Putnam will **withhold votes** from any incumbent nominee for director who served on a board that adopted, renewed, or made a material adverse modification to a shareholder rights plan (commonly referred to as a "poison pill") without shareholder approval during the current or prior calendar year. (This is applicable to any type of poison pill, for example, advance-warning type pill, EGM pill, and Trust Defense Plans in Japan.)

Putnam will refrain from opposing the board members who served at the time of the adoption of the poison pill if the duration is one year or less, if the plan contains other suitable restrictions; or if the company publicly discloses convincing rationale for its adoption and seeks shareholder approval of future renewals of the poison pill. (Suitable restrictions could include but are not limited to, a higher threshold for passive investors. Convincing rationale could include circumstances such as, but not limited to, extreme market disruption or conditions, stock volatility, substantial merger, active investor interest, or takeover attempts.)

- Putnam will vote on a **case-by-case** basis and may consider voting against the Nominating Committee Chair if there is a lack of evidence of board diversity.

Putnam is concerned about over-committed directors. In some cases, directors may serve on too many boards to make a meaningful contribution. This may be particularly true for senior executives of public companies (or other directors with substantially full-time employment) who serve on more than a few outside boards.

- Putnam will vote **against** any non-executive nominee for director who serves on more than four (4) public company boards, except where Putnam would otherwise be withholding votes for the entire board of directors. For the purpose of this guideline, boards of affiliated registered investment companies and other similar entities such as UCITS will count as one board. Generally, Putnam will withhold support from directors serving on more than four unaffiliated public company boards, although an exception may be made in the case of a director who represents an investing firm with the sole purpose of managing a portfolio of investments that includes the company.

- Putnam will **withhold** votes from any nominee for director who serves as an executive officer of any public company ("home company") while serving on more than two (2) public company board**s** other than the home company board. (Putnam will withhold votes from the nominee at each company where Putnam client portfolios own shares.) In addition, if Putnam client portfolios are shareholders of the executive's home company, Putnam will withhold votes from members of the company's governance committee. For the purpose of this guideline, boards of affiliated registered investment companies and other similar entities such as UCITS will count as one board.

- Putnam will **withhold votes** from any nominee for director of a public company (Company A) who is employed as a senior executive of another public company (Company B) if a director of Company B serves as a senior executive of Company A (commonly referred to as an "interlocking directorate").

Board independence depends not only on its members' individual relationships, but also the board's overall attitude toward management. Independent boards are committed to good corporate governance practices and, by providing objective independent judgment, enhancing shareholder value. Putnam may withhold votes on a case-by-case basis from some or all directors that, through their lack of independence, have failed to observe good corporate governance practices or, through specific corporate action, have demonstrated a disregard for the interest of shareholders.

Note: Designation of executive director is based on company disclosure.

- Putnam will vote **against** proposals that provide that a director may be removed only for cause. Putnam will generally vote **for** proposals that permit the removal of directors with or without cause.

- Putnam will vote **against** proposals authorizing a board to fill a director vacancy without shareholder approval.

- Putnam will vote on a **case-by-case** basis on subsidiary director nominees if Putnam will be voting against the nominees of the parent company's board.

- Putnam will vote on a **case-by-case** basis for director nominees, including nominees for positions on Supervisory Boards or Supervisory Committees, or similar board entities (depending on board structure), for (re)election when cumulative voting applies.

- Putnam will vote **for** proposals to approve annual directors' fees, except that Putnam will vote on a **case-by-case** basis if Putnam's independent proxy voting service has recommended a vote against such proposal. Additionally, Putnam will vote **for** proposals to approve the grant of equity awards to directors, except that Putnam will consider these proposals on a **case-by-case** basis if Putnam's proxy service provider is recommending a vote against the proposal.

Classified Boards

- Putnam will vote **against** proposals to classify a board, absent special circumstances indicating that shareholder interests would be better served by this structure.

Ratification of Auditors

- Putnam will vote on a **case-by-case** basis on proposals to ratify the selection of independent auditors if there is evidence that the audit firm's independence or the integrity of an audit is compromised. (Otherwise, Putnam will vote **for**.)

Contested Elections of Directors

- Putnam will vote on a **case-by-case** basis in contested elections of directors.

B. Executive Compensation

Putnam will vote on a **case-by-case** basis on board-approved proposals relating to executive compensation, except as follows:

- Putnam will vote **for** stock option and restricted stock plans that will result in an average annual dilution of 1.67% or less (based on the disclosed term of the plan and including all equity-based plans), except where Putnam would otherwise be withholding votes for the entire board of directors in which case Putnam will evaluate the plans on a **case-by-case** basis.

- Putnam will vote **against** stock option and restricted stock plans that will result in an average annual dilution of greater than 1.67% (based on the disclosed term of the plan and including all equity plans).

- Putnam will vote **against** any stock option or restricted stock plan where the company's actual grants of stock options and restricted stock under all equity-based compensation plans during the prior three (3) fiscal years have resulted in an average annual dilution of greater than 1.67%.

    - Additionally, if the annualized dilution cannot be calculated, Putnam will vote **for** plans where the Total Potential Dilution is 5% or less. If the annualized dilution cannot be calculated and the Total Potential Dilution exceeds 5%, then Putnam will vote **against**. Note: Such plans must first pass all of Putnam's other screens.

- Putnam will vote proposals to issue equity grants to executives on a **case-by-case** basis.

- Putnam will vote **against** stock option plans that permit replacing or repricing of underwater options (and **against** any proposal to authorize such replacement or repricing of underwater options).

- Putnam will vote **against** stock option plans that permit issuance of options with an exercise price below the stock's current market price.

- Putnam will vote **against** stock option plans/ restricted stock plans with evergreen features providing for automatic share replenishment.

- Putnam will vote **for** bonus plans under which payments are treated as performance-based compensation that is deductible under Section 162(m) of the Internal Revenue Code of 1986, as amended, except as follows:

    Vote on a **case-by-case** basis on such proposals if any of the following circumstances exist:

    - the amount per employee under the plan is unlimited, or
    - the maximum award pool is undisclosed, or
    - the incentive bonus plan's performance criteria are undisclosed, or
    - the independent proxy voting service recommends a vote against.

- Putnam will vote in favor of the annual presentation of advisory votes on executive compensation (Say-on-Pay).

- Putnam will generally vote **for** advisory votes on executive compensation (Say-on-Pay). However, Putnam will vote **against** an advisory vote if the company fails to effectively link executive compensation to company performance according to benchmarking performed by the independent proxy voting service.

    - Putnam will review the proposal on a **case-by-case** basis if there is no recommendation of the independent proxy voting service.

- Putnam will vote on a **case-by-case** basis on severance agreements (e.g., golden and tin parachutes)

- Putnam will **withhold** votes from members of a Board of Directors which has approved compensation arrangements Putnam's investment personnel have determined are grossly unreasonable at the next election at which such director is up for re-election.

- Putnam will vote **for** employee stock purchase plans that have the following features: (1) the shares purchased under the plan are acquired for no less than 85% of their market value, (2) the offering period under the plan is 27 months or less, and (3) dilution is 10% or less.

- Putnam will vote **for** Non-qualified Employee Stock Purchase Plans with all the following features:

    1) Broad-based participation (i.e., all employees of the company with the exclusion of individuals with 5 percent or more of beneficial ownership of the company).

    2) Limits on employee contribution, which may be a fixed dollar amount or expressed as a percent of base salary.

    3) Company matching contribution up to 25 percent of employee's contribution, which is effectively a discount of 20 percent from market value.

    4) No discount on the stock price on the date of purchase since there is a company matching contribution.

Putnam will vote **against** Non-qualified Employee Stock Purchase Plans when any of the plan features do not meet the above criteria.

Putnam may vote against executive compensation proposals on a **case-by-case** basis where compensation is excessive by reasonable corporate standards, or where a company fails to provide transparent disclosure of executive compensation. In voting on proposals relating to executive compensation, Putnam will consider whether the proposal has been approved by an independent compensation committee of the board.

C. Capitalization

Putnam will vote on a case-by-case basis on board-approved proposals involving changes to a company's capitalization, except as follows:

- Putnam will vote **for** proposals relating to the authorization of additional common stock, except that Putnam will evaluate such proposals on a **case-by-case** basis if (i) they relate to a specific transaction or to common stock with special voting rights, (ii) the company has a non-shareholder approved poison pill in place, or (iii) the company has had sizeable stock placements to insiders within the past three years at prices substantially below market value without shareholder approval.

- Putnam will vote **for** proposals to effect stock splits (excluding reverse stock splits.)

- Putnam will vote **for** proposals authorizing share repurchase programs, except that Putnam will vote on a **case-by-case** basis if there are concerns that there may be abusive practices related to the share repurchase programs.

D. Acquisitions, Mergers, Reorganizations and Other Transactions

Putnam will vote on a **case-by-case** basis on business transactions such as acquisitions, mergers, reorganizations involving business combinations, liquidations and sale of all or substantially all of a company's assets.

E. Anti-Takeover Measures

Putnam will vote **against** board-approved proposals to adopt anti-takeover measures such as supermajority voting provisions, issuance of blank check preferred stock, the creation of a separate class of stock with disparate voting rights, control share acquisition provisions, targeted share placements, and ability to make greenmail payments, except as follows:

- Putnam will vote on a **case-by-case** basis on proposals to ratify or approve shareholder rights plans;

- Putnam will vote on a **case-by-case** basis on proposals to adopt fair price provisions.

- Putnam will vote on a **case-by-case** basis on proposals to issue blank check preferred stock in the case of REITs (only).

- Putnam will generally vote **for** proposals that enable or expand shareholders' ability to take action by written consent.

- Putnam will vote on a **case-by-case** basis on proposals to increase shares of an existing class of stock with disparate voting rights from another share class.

- Putnam will vote on a **case-by-case** basis on **shareholder or board-approved** proposals to eliminate supermajority voting provisions at controlled companies (companies in which an individual or a group voting collectively holds a majority of the voting interest).

- Putnam will vote on a **case-by-case basis** on **board-approved** proposals to adopt supermajority voting provisions at controlled companies (companies in which an individual or a group voting collectively holds a majority of the voting interest).

- Putnam will vote on a **case-by-case** basis on proposals to issue blank check preferred stock if appropriate "*de-clawed"* language is present. Specifically, appropriate *de-clawed* language will include cases where the Company states (i.e., through 8-K, proxy statement or other public disclosure) it will not use the preferred stock for anti-takeover purposes, or in order to implement a shareholder rights plan, or discloses a commitment to submit any future issuances of preferred stock to be used in a shareholder rights plan/anti-takeover purpose to a shareholder vote prior to its adoption.

F. Other Business Matters

- Putnam will vote **for** board-approved proposals approving routine business matters such as changing the company's name and procedural matters relating to the shareholder meeting, except as follows:

  - Putnam will vote on a **case-by-case** basis on proposals to amend a company's charter or bylaws (except for charter amendments necessary or to effect stock splits, to change a company's name, to authorize additional shares of common stock or other matters which are considered routine (for example, director age or term limits), technical in nature, fall within Putnam's guidelines (for example, regarding board size or virtual meetings), are required pursuant to regulatory and/or listing rules, have little or no economic impact or will not negatively impact shareholder rights).

  - Additionally, Putnam believes the bundling of items, whether the items are related or unrelated, is generally not in shareholders' best interest. We may vote **against** the entire bundled proposal if we would normally vote against any of the items if presented individually. In these cases, we will review the bundled proposal on a **case-by-case** basis.

  - Putnam generally supports quorum requirements if the level is set high enough to ensure a broad range of shareholders is represented in person or by proxy but low enough so that the Company can transact necessary business. Putnam will vote on a **case-by-case** basis on proposals seeking to change quorum requirements; however, Putnam will normally support proposals that seek to comply with market or exchange requirements.

- Putnam will vote on a **case-by-case** basis on proposals seeking to change a company's state of incorporation. However, Putnam will vote **for** mergers and reorganizations involving business combinations designed solely to reincorporate a company in Delaware.

- Putnam will vote **against** authorization to transact other unidentified, substantive business at the meeting.

- Putnam will vote **against** proposals where there is a lack of information to make an informed voting decision.

- Putnam will vote as follows on proposals to adjourn shareholder meetings:

If Putnam is withholding support for the board of the company at the meeting, any proposal to adjourn should be referred for **case-by-case** analysis.

If Putnam is not withholding support for the board, Putnam will vote in favor of adjourning, unless the vote concerns an issue that is being referred back to Putnam for case-by-case review. Under such circumstances, the proposal to adjourn should also be referred to Putnam for **case-by-case** analysis.

- Putnam will vote **against** management proposals to adopt a specific state's courts, or a specific U.S. district court as the exclusive forum for certain disputes, except that Putnam will vote **for** proposals adopting the State of Delaware, or the Delaware Chancery Court, as the exclusive forum, for corporate law matters for issuers incorporated in Delaware. Requiring shareholders to bring actions solely in one state may discourage the pursuit of derivative claims by increasing their difficulty and cost. However, Putnam's guideline recognizes the expertise of the Delaware state court system in handling disputes involving Delaware corporations. In addition, Putnam will **withhold votes** from the chair of the Nominating/Governance committee if a company amends its Bylaws, or takes other actions, to adopt a specific state's courts (other than Delaware courts, for issuers incorporated in Delaware) or a specific U.S. district court as the exclusive forum for certain disputes without shareholder approval.

- Putnam will vote on a case-by-case basis on management proposals seeking to adopt a bylaw amendment allowing the company to shift legal fees and costs to unsuccessful plaintiffs in intra-corporate litigation (fee-shifting bylaw). Additionally, Putnam will vote against the Chair of the Nominating/Governance committee if a company adopts a fee-shifting bylaw amendment without shareholder approval.

- Putnam will support management/shareholder proxy access proposals as long as the proposals align with the following principles for a shareholder (or up to 20 shareholders together as a group) to receive proxy access:

  1) The required minimum aggregate ownership of the Company's outstanding common stock is no greater than 3%;

  2) The required minimum holding period for the shareholder proponent(s) is no greater than two years; and

  3) The shareholder(s) are permitted to nominate at least 20% of director candidates for election to the board.

  Proposals requesting shares be held for 3 years will be reviewed on a **case-by-case** basis. Putnam will vote **against** proposals requesting shares be held for more than three years. Proposals that meet Putnam's stated criteria and include other requirements relating to issues such as, but not limited to, shares on loan or compensation agreements with nominees, will be reviewed on a **case-by-case** basis.

  Additionally, shareholder proposals seeking an amendment to a company's proxy access policy which include any one of the supported criteria under Putnam's guidelines, for example, a 2-year holding period for shareholders, will be reviewed on a **case-by-case** basis.

  Putnam supports management / shareholder proposals giving shareholders the right to call a special meeting as long as the ownership requirement in such proposals is at least **15%** of the company's outstanding common stock and not more than **25%**.

  In general, Putnam will vote **for** management or shareholder proposals to reduce the ownership requirement below a company's existing threshold, as long as the new threshold is at least **15%** and not greater than **25%** of the company's outstanding common stock.

  Putnam will vote **against** any proposal with an ownership requirement exceeding **25%** of the company's common stock or an ownership requirement that is less than **15%** of the company's outstanding common stock.

  In cases where there are competing management and shareholder proposals giving shareholders the right to call a special meeting, Putnam will generally vote **for** the proposal which has the lower minimum shareholder ownership threshold, as long as that threshold is within Putnam's recommended minimum/maximum thresholds. If only one of the competing proposals has a threshold that falls within Putnam's threshold range, Putnam will normally support that proposal as long as

it represents an improvement (reduction) from the previous requisite ownership level. Putnam will normally vote **against** both proposals if neither proposal has a requisite ownership level between **15%** and **25%** of the company's outstanding common stock**.**

- Putnam will generally vote **fo**r management or shareholder proposals to allow a company to hold virtual-only or hybrid shareholder meetings or to amend its articles/charter/by-laws to allow for virtual-only or hybrid shareholder meetings, provided the proposal does not preclude in-person meetings (at any given time), and does not otherwise limit or impair shareholder participation; and if the company has provided clear disclosure to ensure that shareholders can effectively participate in virtual-only shareholder meetings and meaningfully communicate with company management and directors. Additionally, Putnam may consider the rationale of the proposal and whether there have been concerns about the company's previous meeting practices.

  Disclosure should address the following:

  - the ability of shareholders to ask questions during the meeting
    - including time guidelines for shareholder questions
    - rules around what types of questions are allowed
    - and rules for how questions and comments will be recognized and disclosed to meeting participants
    - the manner in which appropriate questions received during the meeting will be addressed by the board
  - procedures, if any, for posting appropriate questions received during the meeting and the company's answers on the investor page of their website as soon as is practical after the meeting
  - technical and logistical issues related to accessing the virtual meeting platform; and
  - procedures for accessing technical support to assist in the event of any difficulties accessing the virtual meeting

  Putnam may vote against proposals that do not meet these criteria.

  Additionally, Putnam may vote **against** the Chair of the Governance Committee when the board is planning to hold a virtual-only shareholder meeting and the company has not provided sufficient disclosure (as noted above) or shareholder access to the meeting.

- Putnam will vote **for** proposals to approve a company's board-approved climate transition action plan ("say on climate" proposals in which the company's board proposes that shareholders indicate their support for the company's plan), unless the proxy voting service has recommended a vote against the proposal, in which case Putnam will vote on a **case-by-case** basis on the proposal.

- Putnam will vote on a **case-by-case** basis on board-approved proposals that conflict with shareholder proposals.

II. Shareholder Proposals

Shareholder proposals are non-binding votes that are often opposed by management. Some proposals relate to matters that are financially immaterial to the company's business, while others may be impracticable or costly for a company to implement. At the same time, well-crafted shareholder proposals may serve the purpose of raising issues that are material to a company's business for management's consideration and response. Putnam seeks to weigh the costs of different types of proposals against their expected financial benefits. More specifically:

Putnam will vote **in accordance with the recommendation of the company's board of directors** on all shareholder proposals, except as follows:

- Putnam will vote **for** shareholder proposals that are consistent with Putnam's proxy voting guidelines for board-approved proposals.

- Putnam will vote **for** shareholder proposals to declassify a board, absent special circumstances which would indicate that shareholder interests are better served by a classified board structure.

- Putnam will vote **for** shareholder proposals to require shareholder approval of shareholder rights plans.

- Putnam will vote **for** shareholder proposals asking that director nominees receive support from holders of a majority of votes cast or a majority of shares outstanding of the company in order to be (re) elected.

- Putnam will review on a **case-by-case** basis, shareholder proposals requesting that the board adopt a policy whereby, in the event of a significant restatement of financial results or significant extraordinary write-off, the board will recoup, to the fullest extent practicable, for the benefit of the company, all performance-based bonuses or awards that were made to senior executives based on having met or exceeded specific performance targets to the extent that the specified performance targets were not met.

- Putnam will vote **for** shareholder proposals urging the board to seek shareholder approval of any future supplemental executive retirement plan ("SERP"), or individual retirement arrangement, for senior executives that provides credit for additional years of service not actually worked, preferential benefit formulas not provided under the company's tax-qualified retirement plans, accelerated vesting of retirement benefits or retirement perquisites and fringe benefits that are not generally offered to other company employees. (Implementation of this policy shall not breach any existing employment agreement or vested benefit.)

- Putnam will vote **for** shareholder proposals requiring companies to report on their executive retirement benefits. (Deferred compensation, split-dollar life insurance, SERPs and pension benefits)

- Putnam will vote **for** shareholder proposals requesting that a company establish a pay-for-superior-performance standard whereby the company discloses defined financial and/or stock price performance criteria (along with the detailed list of comparative peer group) to allow shareholders to sufficiently determine the pay and performance correlation established in the company's performance-based equity program. In addition, no multi-year award should be paid out unless the company's performance exceeds, during the current CEO's tenure (three or more years), its peer median or mean performance on selected financial and stock price performance criteria.

- Putnam will vote **for** shareholder proposals urging the board to disclose in a separate report to shareholders, the Company's relationships with its executive compensation consultants or firms. Specifically, the report should identify the entity that retained each consultant (the company, the board or the compensation committee) and the types of services provided by the consultant in the past five years (non-compensation-related services to the company or to senior management and a list of all public company clients where the Company's executives serve as a director.)

- Putnam will vote **for** shareholder proposals requiring companies to accelerate vesting of equity awards under management severance agreements only if both of the following conditions are met:

  - the company undergoes a change in control, and

  - the change in control results in the termination of employment for the person receiving the severance payment.

- Putnam will vote **for** shareholder proposals requiring that the chair's position be filled by an independent director (separate chair/CEO). However, Putnam will vote on a **case-by-case** basis on such proposals when the company's board has a lead-independent director (or already has an independent or separate chair) and Putnam is supporting the nominees for the board of directors.

- Putnam will vote **for** shareholder proposals seeking the submission of golden coffins to a shareholder vote or the elimination of the practice altogether.

- Putnam will vote **for** shareholder proposals seeking a policy that forbids any director who receives more than 25% withhold votes cast (based on for and withhold votes) from serving on any key board committee for two years and asking the board to find replacement directors for the committees if need be.

- Putnam will vote **for** shareholder proposals urging the board to seek shareholder approval of severance agreements (e.g., golden and tin parachutes).

    - However, Putnam will vote **against** such proposals when the company has a policy that minimally requires shareholder approval of severance agreements for executives that provides for cash severance benefits exceeding 2.99 times the sum of the executive's base salary plus target annual non-equity incentive plan bonus opportunity.

  Putnam will vote on a **case-by-case** basis on approving such compensation arrangements.

- Putnam will vote **for** shareholder proposals requiring companies to make cash payments under management severance agreements only if both of the following conditions are met: the company undergoes a change in control, and the change in control results in the termination of employment for the person receiving the severance payment.

- Putnam will vote on a **case-by-case** basis on shareholder proposals to limit a company's ability to make excise tax gross-up payments under management severance agreements as well as proposals to limit income or other tax gross-up payments.

- Putnam will vote **in accordance with the recommendation of the company's board of directors** on shareholder proposals regarding corporate political spending, unless Putnam is voting against the directors, in which case the proposal would be reviewed on a **case-by-case** basis.

- Putnam will vote on a **case-by-case** basis on shareholder proposals that conflict with board-approved proposals.

Environmental and Social

- Putnam believes that sustainable environmental practices and sustainable social policies are important components of long-term value creation. Companies should evaluate the potential risks to their business operations that are directly related to environmental and social factors (among others). In evaluating shareholder proposals relating to environmental and social initiatives, Putnam takes into account (1) the relevance and materiality of the proposal to the company's business, (2) whether the proposal is well crafted (e.g., whether it references science-based targets, or standard global protocols), and (3) the practicality or reasonableness of implementing the proposal.

  Putnam may support well-crafted and well-targeted proposals that request additional reporting or disclosure on a company's plans to mitigate risk to the company related to the following issues and/or their strategies related to these issues: Environmental issues, including but not limited to, climate change, greenhouse gas emissions, renewable energy, and broader sustainability issues; and Social issues, including but not limited to, fair pay, employee diversity and development, safety, labor rights, supply chain management, privacy and data security.

  In addition, Putnam will consider proposals related to Artificial Intelligence ("AI") on a case-by-case basis.

  Putnam will consider factors such as (i) the industry in which the company operates, (ii) the company's current level of disclosure, (iii) the company's level of oversight, (iv) the company's management of risk arising out of these matters, (v) whether the company has suffered a material financial impact. Other factors may also be considered.

  Putnam will consider the recommendation of its third-party proxy service provider and may consider other factors such as third-party evaluations of ESG performance.

  Additionally, Putnam may vote on a **case-by-case** basis on proposals which ask a company to take action beyond reporting where our third-party proxy service provider has identified one or more reasons to warrant a vote FOR.

III. Voting Shares of Non-US Issuers

Many non-US jurisdictions impose material burdens on voting proxies. There are three primary types of limits as follows:

1) Share blocking. Shares must be frozen for certain periods of time to vote via proxy.

2) Share re-registration. Shares must be re-registered out of the name of the local custodian or nominee into the name of the client for the meeting and, in many cases, then re-registered back. Shares are normally blocked in this period.

3) Powers of Attorney. Detailed documentation from a client must be given to the local sub-custodian. In many cases Putnam is not authorized to deliver this information or sign the relevant documents.

Putnam's policy is to weigh the benefits to clients from voting in these jurisdictions against the detriments of not doing so. For example, in a share blocking jurisdiction, it will normally not be in a client's interest to freeze shares simply to participate in a non-contested routine meeting. More specifically, Putnam will normally not vote shares in non-US jurisdictions imposing burdensome proxy voting requirements except in significant votes (such as contested elections and major corporate transactions) where directed by portfolio managers.

Putnam recognizes that the laws governing non-US issuers will vary significantly from US law and from jurisdiction to jurisdiction. Accordingly, it may not be possible or even advisable to apply these guidelines mechanically to non-US issuers. However, Putnam believes that shareholders of all companies are protected by the existence of a sound corporate governance and disclosure framework. Accordingly, Putnam will vote proxies of non-US issuers **in accordance with the foregoing guidelines where applicable**, except as follows:

- Putnam will vote **for** shareholder proposals calling for a majority of the directors to be independent of management.

- Putnam will vote **for** shareholder proposals that implement corporate governance standards similar to those established under U.S. federal law and the listing requirements of U.S. stock exchanges, and that do not otherwise violate the laws of the jurisdiction under which the company is incorporated.

- Putnam will vote on a **case-by-case** basis on proposals relating to (1) the issuance of common stock in excess of 20% of a company's outstanding common stock where shareholders do not have preemptive rights, or (2) the issuance of common stock in excess of 100% of a company's outstanding common stock where shareholders have preemptive rights.

- Putnam will vote **for** proposals to authorize share repurchase programs that are recommended for approval by Putnam's proxy voting service provider, otherwise Putnam will vote **against** such proposals; except that Putnam will vote on a **case-by-case basis** if there are concerns that there may be abusive practices related to the share repurchase programs.

- Putnam will vote **against** authorizations to repurchase shares or issue shares or convertible debt instruments with or without preemptive rights when such authorization can be used as a takeover defense without shareholder approval. Putnam will not apply this policy to a company with a shareholder who controls more than 50% of its voting rights.

- Putnam will generally vote **for** proposals that include debt issuances, however substantive/non-routine proposals, and proposals that fall outside of normal market practice or reasonable standards, will be reviewed on a **case-by-case** basis.

- Putnam will vote **for** board-approved routine, market-practice proposals. These proposals are limited to (1) those issues that will have little or no economic impact, such as technical, editorial, or mandatory regulatory compliance items, (2) those issues that will not adversely affect and/or which clearly improve shareholder rights/values, and which do not violate Putnam's proxy voting guidelines, or (3) those issues that do not seek to deviate from existing laws or regulations. Examples include but are not limited to, related party transactions (non-strategic), profit-and-loss transfer agreements (Germany), authority to increase paid-in capital (Taiwan). Should any unusual circumstances be identified concerning a normally routine issue, such proposals will be referred back to Putnam for internal review.

- Putnam will generally vote **for** proposals regarding amendments seeking to expand business lines or to amend the corporate purpose, provided the proposal would not include a significant or material departure from the company's current business, and/or will provide the company with greater flexibility in the performance of its activities.

- Putnam will normally vote **for** management proposals concerning allocation of income and the distribution of dividends. However, Putnam portfolio teams will override this guideline when they conclude that the proposals are outside the market norms (i.e., those seen as consistently and unusually small or large compared to market practices).

- Putnam will generally vote **for** proposals seeking to adjust the par value of common stock. However, non-routine, substantive proposals will be reviewed on a **case-by-case** basis.

- Putnam will vote **against** proposals that would authorize the company to reduce the notice period for calling special or extraordinary general meetings to less than 21-Days.

- Putnam will generally vote **for** proposals relating to transfer of reserves/increase of reserves (i.e., France, Japan). However, Putnam will vote on a **case-by-case** basis if the proposal falls outside of normal market practice.

- Putnam will generally vote **for** proposals to increase the maximum variable pay ratio. However, Putnam will vote on a **case-by-case** basis if we are voting against a company's remuneration report or if the proposal seeks an increase in excess of 200%.

- Putnam will review stock option plans on a **case-by-case** basis which allow for the options exercise price to be reduced by dividend payments (if the plan would normally pass Putnam's Guidelines).

- Putnam will generally vote **for** requests to provide loan guarantees however, Putnam will vote on a **case-by-case** basis if the total amount of guarantees is in excess of 100% of the company's audited net assets.

- Putnam will generally support remuneration report/policy proposals (i.e., advisory/binding) where a company's executive compensation is linked directly with the performance of the business and executive. Putnam will generally support compensation proposals which incorporate a mix of reasonable salary and performance based short- and long-term incentives. Companies should demonstrate that their remuneration policies are designed and managed to incentivize and retain executives while growing the company's long-term shareholder value.

  Generally, Putnam will vote **against** remuneration report/policy proposals (i.e., advisory/binding) in the following cases:

  - Disconnect between pay and performance
  - No performance metrics disclosed;
  - No relative performance metrics utilized;
  - Single performance metric was used and it was an absolute measure;
  - Performance goals were lowered when management failed or was unlikely to meet original goals;
  - Long Term Incentive Plan is subject to retesting (e.g., Australia);
  - Service contracts longer than 12 months (e.g., United Kingdom);
  - Allows vesting below median for relative performance metrics;
  - Ex-gratia / non-contractual payments have been made (e.g., United Kingdom and Australia);
  - Contains provisions to automatically vest upon change-of-control; or

- Other poor compensation practices or structures.

- Pension provisions for new executives is not at the same level as the majority of the wider workforce; pension provisions for incumbent executives are not set to decrease over time (United Kingdom)

- Proposed CEO salary increases are not justifiably appropriate in comparison to wider workforce or rationale for exception increases is not fully disclosed (United Kingdom)

➢ Putnam will vote on a **case-by-case basis** on bonus payments to executive directors or senior management; however, Putnam will vote **against** payments that include outsiders or independent statutory auditors.

Matters Relating to Board of Directors

Uncontested Board Elections

Asia: China, Hong Kong, India, Indonesia, Philippines, Taiwan and Thailand

➢ Putnam will **vote against** the entire board of directors if

- fewer than one-third of the directors are independent directors, or
    - the board has not established audit, compensation and nominating committees each composed of a majority of independent directors, or
    - the chair of the audit, compensation or nominating committee is not an independent director.

Commentary: Companies listed in China (or dual-listed in China and Hong Kong) often have a separate supervisory committee in addition to a standard board of directors containing audit, compensation, and nominating committees. The supervisory committee provides oversight of the financial affairs of the company and supervises members of the board and management, while the board of directors makes decisions related to the company's business and investment strategies. The supervisory committee normally comprises employee representatives and shareholder representatives. Shareholder representatives are elected by shareholders of the company while employee representatives are elected by the company's staff. Shareholder representatives may be independent or may be affiliated with the company or its substantial shareholders. Current laws and regulations neither provide a basis for evaluation of supervisor independence nor do they require a supervisor to be independent.

➢ Putnam will generally vote in favor of nominees to the Supervisory Committee

Australia

➢ Putnam will vote **against** the entire board of directors if

- fewer than a majority of the directors are independent, or
- the board has not established an audit committee composed solely of non-executive directors, a majority of whom, including the chair of the committee (who should not be the board chair), should be independent directors, or
- the board has not established nominating and compensation committees each composed of a majority of independent, non-executive directors, with an independent chair.

Brazil

➢ Putnam will vote against proposals requesting cumulative voting unless there are more candidates than number of seats available, in which case vote for.

- Putnam will vote **for** proposals for the proportional allocation of cumulative votes if Putnam is supporting the entire slate of nominees. Putnam will vote **against** such proposals if Putnam is not supporting the entire slate.

- Putnam will **abstain** on individual director allocation proposals if Putnam is voting for the proportional allocation of cumulative votes. Putnam will vote on a **case-by-case** basis on individual director allocation proposals if Putnam is voting against the proportional allocation of votes.

- Putnam will vote **for** proposals to cumulate votes of common and preferred shareholders if the nominees are known and Putnam is supporting the applicable nominees; Putnam will vote **against** such proposals if Putnam is not supporting the known nominees, or if the nominees are unknown.

- Putnam will generally vote **against** proposals seeking the recasting of votes for amended slate (as new candidates could be included in the amended slate without prior disclosure to shareholders).

- Putnam will vote **against** proposals regarding instructions if meeting is held on second call if election of directors is part of the recasting as the slate can be amended without (prior) disclosure to shareholders.

- Putnam will vote **against** proposals regarding the casting of minority votes to the candidate with largest number of votes.

Canada

Canadian corporate governance requirements mirror corporate governance reforms that have been adopted by the NYSE and other U.S. national securities exchanges and stock markets. As a result, Putnam will vote on matters relating to the board of directors of Canadian issuers **in accordance with the guidelines applicable to U.S. issuers.**

Commentary: Like the UK's Combined Code on Corporate Governance, the policies on corporate governance issued by Canadian securities regulators embody the "comply and explain" approach to corporate governance. Because Putnam believes that the board independence standards contained in the proxy voting guidelines are integral to the protection of investors in Canadian companies, these standards will be applied in a prescriptive manner.

Continental Europe (ex-Germany)

- Putnam will vote **against** the entire board of directors if

    - fewer than a majority of the directors are independent directors, or

    - the board has not established audit, nominating and compensation committees each composed of a majority of independent directors.

Commentary: An "independent director" under the European Commission's guidelines is one who is free of any business, family or other relationship, with the company, its controlling shareholder or the management of either, that creates a conflict of interest such as to impair his judgment. A "non-executive director" is one who is not engaged in the daily management of the company.

In France, Employee Representatives are employed by the company and represent rank and file employees. These representatives are elected by company employees. The law also provides for the appointment of employee shareholder representatives, if the employee shareholdings exceed 3% of the share capital. Employee shareholder representatives are elected by the company's shareholders (via general meeting).

Germany

- For companies subject to "co-determination," Putnam will vote for the election of nominees to the supervisory board, except:

- Putnam will vote against the Supervisory Board if

- the board has not established an audit committee comprising an Independent chair.
- the audit committee chair serves as board chair.
- the board contains more than two former management board members.

➢ Putnam will vote against the election of a former member of the company's managerial board to chair of the supervisory board.

Commentary: German corporate governance is characterized by a two-tier board system - a managerial board composed of the company's executive officers, and a supervisory board. The supervisory board appoints the members of the managerial board. Shareholders elect members of the supervisory board, except that in the case of companies with a large number of employees, company employees are allowed to elect some of the supervisory board members (one-half of supervisory board members are elected by company employees at companies with more than 2,000 employees; one-third of the supervisory board members are elected by company employees at companies with more than 500 employees but fewer than 2,000). This practice is known as co-determination.

Israel

Non-Controlled Banks: Director elections at Non-Controlled banks are overseen by the Supervisor of the Banks and nominees for election as "other" (non-external) directors and external directors (under Companies Law and Directive 301) are put forward by an external and independent committee. As such,

➢ Putnam's guidelines regarding board Nominating Committees will not apply

➢ Putnam will vote on a **case-by-case** on nominees when there are more nominees than seats available.

Italy

Election of directors and statutory auditors:

➢ Putnam will apply the director guidelines to the majority shareholder supported list and vote accordingly (**for** or **against**) if multiple lists of director candidates are presented. If there is no majority shareholder supported slate of nominees, Putnam will support the shareholder slate of nominees that is recommended for approval by Putnam's service provider.

➢ Putnam will vote **against** the entire list of director nominees if the list is bundled as one proposal and if Putnam would otherwise be voting against any one director nominee.

➢ Putnam will generally vote **for** the majority shareholder supported list of statutory auditor nominees.

Note: Pursuant to Italian law, directors and statutory auditors are elected through a slate voting system whereby candidates are presented in lists submitted by shareholders representing a minimum percentage of share capital.

➢ Putnam will withhold votes from any director not identified in the proxy materials. (Example: Co-opted director nominees.)

Japan

➢ For companies that have established a U.S.-style corporate governance structure, Putnam will **withhold votes** from the entire board of directors if:

- the board does not have a majority of outside directors,

- the board has not established nominating and compensation committees composed of a majority of outside directors,
- the board has not established an audit committee composed of a majority of independent directors, or
- the board does not have at least two independent directors for companies with a controlling shareholder.

➢ For companies that have established a statutory auditor board structure:

- Putnam will **withhold votes** from the appointment of members of a company's board of statutory auditors if a majority of the members of the board of statutory auditors is not independent.

➢ For companies that have established a statutory auditor board structure, Putnam will **withhold votes** from the entire board of directors if:

- the board does not have at least two outside directors, or
- the board does not have at least two independent directors for companies with a controlling shareholder.
- Putnam will vote **against** any statutory auditor nominee who attends fewer than 75% of board and committee meeting without valid reasons for the absences (i.e., illness, personal emergency, etc.) (Note that Corporate Law requires disclosure of outsiders' attendance but not that of insiders, who are presumed to have no more important time commitments.)

➢ For companies that have established an audit committee board structure (one-tier / one committee), Putnam will **withhold votes** from the entire board of directors if:

- the board does not have at least two outside directors,
- the board does not have at least two independent directors for companies with a controlling shareholder, or
- the board has not established an audit committee composed of a majority of independent directors

Election of Executive Director and Election of Supervisory Director - REIT

REITs have a unique two-tier board structure with generally one or more executive directors and two or more supervisory directors. The number of supervisory directors must be greater than, not equal to, the number of executive directors. Shareholders are asked to vote on both types of directors. Putnam will vote as follows, provided each board of executive / supervisory directors meets legal requirements.

➢ Putnam will generally vote for the election of Executive Director

➢ Putnam will generally vote for the election of Supervisory Directors

Commentary:

Definition of outside director and independent director:

The Japanese Companies Act focuses on two director classifications: Insider or Outsider. An outside director is a director who is not a director, executive, executive director, or employee of the company or its parent company, subsidiaries or affiliates. Further, a director, executive, executive director or employee, who have executive responsibilities, of the company or subsidiaries can regain eligibility ten years after his or her resignation, provided certain other requirements are met. An outside director is designated as an "independent" director based on the Tokyo Stock Exchange listing rules. An outside director is "independent" if that person can make decisions completely independent from the managers of the company, its parent, subsidiaries, or affiliates

and does not have a material relationship with the company (i.e., major client, trading partner, or other business relationship; familial relationship with current director or executive; etc.).

The guidelines have incorporated these definitions in applying the board independence standards above.

Korea

Putnam will **withhold votes** from the entire board of directors if:

- For large companies (i.e., those with assets of at least KRW 2 trillion); the board does not have at least three independent directors or less than a majority of directors are independent directors,
- For small companies (i.e., those with assets of less than KRW 2 trillion), fewer than one-fourth of the directors are independent directors,
- The board has not established a nominating committee with at least half of the members being outside directors, or
- the board has not established an audit committee composed of at least three members and in which at least two-thirds of its members are independent directors.

Commentary: For purposes of these guidelines, an "outside director" is a director who is independent from the management or controlling shareholders of the company and holds no interests that might impair performing his or her duties impartially from the company, management or controlling shareholder. In determining whether a director is an outside director, Putnam will also apply the standards included in Article 382 of the Korean Commercial Act, i.e., no employment relationship with the company for a period of two years before serving on the committee, no director or employment relationship with the company's largest shareholder, etc.) and may consider other business relationships that would affect the independence of an outside director.

- Putnam will generally vote **for** proposals to amend the Executive Officer Retirement Allowance Policy unless the recipients of the grants include non-executives; the proposal would have a negative impact on shareholders, or the proposal appear to be outside of normal market practice, in which case Putnam will vote **against**.

Malaysia

- Putnam will vote against the entire board of directors if:
    - less than 50% of the directors are independent directors, or less than a majority of the directors are independent directors for large companies,
    - the board has not established an audit committee with all members being independent directors, including the committee chair,
    - the board has not established a nominating committee with all members being non-executive directors, a majority of whom are independent, including the committee chair; the board chair should not serve as a member of the nomination committee, or
    - the board has not established a compensation committee with all members being non-executive directors, a majority of whom are independent; the board chair should not serve as a member of the remuneration committee.

Nordic Markets – Finland, Norway, Sweden

- Putnam will vote against the entire board of directors if:

Board Independence:

- The board does not have a majority of directors independent from the company and management. (Sweden, Finland, Norway)

- The board does not have at least two directors independent from the company and its major shareholders holding > 10% of the Company's share capital. (Sweden, Finland, Norway)

- An executive director is a member of the board. (Norway)

Audit Committee:

- The audit committee does not consist of a majority of directors independent from the company and management. (Sweden, Finland)

- The audit committee does not have at least one director independent from the company and its major shareholders holding > 10% of the Company's share capital. (Sweden, Finland)

- The audit committee is not majority independent. (Norway)

Remuneration Committee:

- The remuneration committee is not fully independent of the company, excluding the chair. (Sweden)

- The remuneration committee is not majority independent of the company. (Finland)

- The remuneration committee does not consist fully of non-executive directors. (Finland)

- The remuneration committee is not fully independent of management (Norway)

- The remuneration committee is not majority independent from the company and its major shareholders holding > 50% of the Company's share capital. (Sweden, Finland, Norway)

Board Nomination Committee:

- The nomination committee does not consist of a majority of directors independent from the company. (Finland)

- An executive is a member of the nomination committee. (Finland)

External Nomination Committee: Vote against the establishment of the nomination committee and its guidelines when:

- The external committee is not majority independent of the company and management. (Sweden)

- The external committee does not have at least one director not affiliated to largest shareholder on the committee. (Sweden)

- The external committee does not meet best practice based on ISS analysis. (Finland)

- The external committee is not majority independent of the board and management. (Norway)

- The external committee has more than one member of the board of the directors sitting on the committee. (Norway)

- There is insufficient disclosure provided for new nominees (Norway)

- An executive is a member of the committee. (Norway)

Russia

- Putnam will vote on a case-by-case basis for the election of nominees to the board of directors.

Commentary: In Russia, director elections are handled through a cumulative voting process. Cumulative voting allows shareholders to cast all of their votes for a single nominee for the board of directors, or to allocate their votes among nominees in any other way. In contrast, in "regular" voting, shareholders may not give more than one vote per share to any single nominee. Cumulative voting can help to strengthen the ability of minority shareholders to elect a director.

Singapore

- Putnam will vote **against** from the entire board of directors if

  - in the case of a board with an independent director serving as chair, fewer than one-third of the directors are independent directors; or, in the case of a board not chaired by an independent director, fewer than half of the directors are independent directors,

  - the board has not established audit and compensation committees, each with an independent director serving as chair, with at least a majority of the members being independent directors, and with all of the directors being non-executive directors, or

  - the board has not established a nominating committee, with an independent director serving as chair, and with at least a majority of the members being independent directors.

United Kingdom, Ireland

Commentary:

Application of guidelines: Although the Combined Code has adopted the "comply and explain" approach to corporate governance, Putnam believes that the guidelines discussed above with respect to board independence standards are integral to the protection of investors in UK companies. As a result, these guidelines will be applied in a prescriptive manner.

Definition of independence: For the purposes of these guidelines, a non-executive director shall be considered independent if the director meets the independence standards in section A.3.1 of the Combined Code (i.e., no material business or employment relationships with the company, no remuneration from the company for non-board services, no close family ties with senior employees or directors of the company, etc.), except that Putnam does not view service on the board for more than nine years as affecting a director's independence.

Smaller companies: A smaller company is one that is below the FTSE 350 throughout the year immediately prior to the reporting year.

- Putnam will **withhold votes** from the entire board of directors if:

  - the board, excluding the Non-Executive Chair, is not comprised of at least half independent non-executive directors,

  - the board has not established a Nomination committee composed of a majority of independent non-executive directors, excluding the Non-Executive Chair, or

  - the board has not established a Compensation committee composed of (1) at least three directors (in the case of smaller companies, as defined by the Combined Code, two directors) and (2) solely of independent non-executive directors. The company chair may be a member of, but not chair, the Committee provided he or she was considered independent on appointment as chair, or

- The board has not established an Audit Committee composed of, (1) at least three directors (in the case of smaller companies as defined by the Combined Code, two directors) and (2) solely of independent non-executive directors. The board chair may not serve on the audit committee of large or small companies.

All other jurisdictions

- In the absence of jurisdiction specific guidelines, Putnam will vote as follows for boards/supervisory boards:
    - Putnam will vote **against** the entire board of directors if
        - fewer than a majority of the directors are independent directors, or
        - the board has not established audit, nominating and compensation committees each composed of a majority of independent directors.

Additional Commentary regarding all Non-US jurisdictions:

Whether a director is considered "independent" or not will be determined by reference to local corporate law or listing standards.

Some jurisdictions may legally require or allow companies to have a certain number of employee representatives, employee shareholder representatives (e.g., France) and/or shareholder representatives on their board. Putnam generally does not consider these representatives independent. The presence of employee representatives or employee shareholder representatives on the board and key committees is generally legally mandated. In most markets, shareholders do not have the ability to vote on the election of employee representatives or employee shareholder representatives. In some markets, significant shareholders have a legal right to nominate shareholder representatives. Shareholders are required to approve the election of shareholder representatives to the board. Unlike employee representatives, there are no legal requirements regarding the presence of shareholder representatives on the board or its committees.

- Putnam will **not include** employee or employee shareholder representatives in the independence calculation of the board or key committees, nor in the calculation of the size of the board.
- Putnam will **include** shareholder representatives in the independence calculation of the board and key committees, and in the calculation of the size of the board.
- Putnam will generally support shareholder or employee representatives if included in the agenda Putnam will vote on a **case-by-case** basis when there are more candidates than seats. Additionally, Putnam will vote **against** such nominees when there is insufficient information disclosed.
- Putnam Investments' policies regarding the provision of professional services and transactional relationship with regard to directors will apply.
- Putnam will vote **for** independent nominees for alternate director, unless such nominees do not meet Putnam's individual director standards.

Shareholder nominated directors/self-nominated directors

- Putnam will vote against shareholder nominees if Putnam supports the board of directors.
- Putnam will vote on a case-by case basis if Putnam will be voting against the current board.
- Putnam will vote on a case-by-case basis if the proposal regarding a self-nominated/shareholder nominated director nominee would add an additional seat to the board if the nominee is approved.

Other Business Matters

Japan

A. Article Amendments

- The Japanese Companies Act gives companies the option to adopt a U.S.-Style corporate structure (i.e., a board of directors and audit, nominating, and compensation committees). Putnam will vote **for** proposals to amend a company's articles of incorporation to adopt the U.S.-Style "Board with Committees" structure. However, the independence of the outside directors is critical to effective corporate governance under this new system. Putnam will, therefore, scrutinize the backgrounds of the outside director nominees at such companies, and will vote **against** the amendment where Putnam believes the board lacks the necessary level of independence from the company or a substantial shareholder.

- Putnam will vote on a **case-by-case** basis on granting the board the authority to repurchase shares at its discretion.

- Putnam will vote **against** amendments to delete a requirement directing the company to reduce authorized capital by the number of treasury shares cancelled. If issued share capital decreases while authorized capital remains unchanged, then the company will have greater leeway to issue new shares (for example as a private placement or a takeover defense).

- Putnam will vote **against** proposals to authorize appointment of special directors. Under the new Corporate Law, companies are allowed to appoint, from among their directors, "special directors" who will be authorized to make decisions regarding the purchase or sale of important assets and major borrowing or lending, on condition that the board has at least six directors, including at least one non-executive director. At least three special directors must participate in the decision-making process and decisions shall be made by a majority vote of the special directors. However, the law does not require any of the special directors to be non-executives, so in effect companies may use this mechanism to bypass outsiders.

- Putnam will generally vote **for** proposals to create new class of shares or to conduct a share consolidation of outstanding shares to squeeze out minority shareholders.

- Putnam will vote **against** proposals seeking to enable companies to establish specific rules governing the exercise of shareholder rights. (Note: Such as, shareholders' right to submit shareholder proposals or call special meetings.)

B. Compensation Related Matters

- Putnam will vote **against** option plans which allow the grant of options to suppliers, customers, and other outsiders.

- Putnam will vote **against** stock option grants to independent internal statutory auditors. The granting of stock options to internal auditors, at the discretion of the directors, can compromise the independence of the auditors and provide incentives to ignore accounting problems, which could affect the stock price over the long term.

- Putnam will vote **against** the payment of retirement bonuses to directors and statutory auditors when one or more of the individuals to whom the grants are being proposed has not served in an executive capacity for the company. Putnam will also vote **against** payment of retirement bonuses to any directors or statutory auditors who have been designated by the company as independent. Retirement bonus proposals are all-or-nothing, meaning that split votes against individual payments cannot be made. If any one individual does not meet Putnam's criteria, Putnam will vote **against** the entire bundled item.

C. Other Business Matters

- Putnam votes **for** mergers by absorptions of wholly-owned subsidiaries by their parent companies. These deals do not require the issuance of shares, and do not result in any dilution or new obligations for shareholders of the parent company. These transactions are routine.

- Putnam will vote **for** the acquisition if it is between parent and wholly-owned subsidiary.

- Putnam will vote **for** the formation of a holding company, if routine. Holding companies are once again legal in Japan and a number of companies, large and small, have sought approval to adopt a holding company structure. Most of the proposals are intended to help clarify operational authority for the different business areas in which the company is engaged and promote effective allocation of corporate resources. As most of the reorganization proposals do not entail any share issuances or any change in shareholders' ultimate ownership interest in the operating units, Putnam will treat most such proposals as routine.

- Putnam will vote **against** proposals that authorize the board to vary the AGM record date.

- Putnam will vote **for** proposals to abolish the retirement bonus system

- Putnam will vote **for** board-approved director/officer indemnification proposals

- Putnam will vote on a **case-by-case** basis on private placements (Third-party share issuances). Where Putnam views the share issuance necessary to avoid bankruptcy or to put the company back on solid financial footing, Putnam will generally vote **for**. When a private placement allows a particular shareholder to obtain a controlling stake in the company at a discount to market prices, or where the private placement otherwise disadvantages ordinary shareholders, Putnam will vote **against**.

- Putnam will generally vote **against** shareholder rights plans (poison pills). However, if all of the following criteria are met, Putnam will evaluate such poison pills on a **case-by-case** basis:

  1) The poison pill must have a duration of no more than three years.

  2) The trigger threshold must be no less than 20 percent of issued capital.

  3) The company must have no other types of takeover defenses in place.

  4) The company must establish a committee to evaluate any takeover offers, and the members of that committee must all meet Putnam's' definition of independence.

  5) At least 20 percent, and no fewer than two, of the directors must meet Putnam's definition of independence. These independent directors must also meet Putnam's guidelines on board meeting attendance.

  6) The directors must stand for reelection on an annual basis.

  7) The company must release its proxy materials no less than three weeks before the meeting date.

- Putnam will vote **against** proposals to allow the board to decide on income allocation without shareholder vote.

- Putnam will vote **against** proposals to limit the liability of External Audit Firms ("Accounting Auditors")

- Putnam will vote **against** proposals seeking a reduction in board size that eliminates all vacant seats.

- Putnam may generally vote **against** proposals seeking an increase in authorized capital that leaves the company with as little as 25 percent of the authorized capital outstanding (general request). However, such proposals will be evaluated on a company specific basis, taking into consideration such factors as current authorization outstanding, existence (or lack thereof) of preemptive rights and rationale for the increase.

- Putnam will vote **for** corporate split agreement and transfer of sales operations to newly created wholly-owned subsidiaries where the transaction is a purely internal one which does not affect shareholders' ownership interests in the various operations. All other proposals will be referred back to Putnam for **case-by-case** review. These reorganizations usually accompany the switch to a holding company structure, but may be used in other contexts.

United Kingdom

- Putnam will not apply the U.S. standard 15% discount cap for employee share purchase schemes at U.K. companies. As such, Putnam will generally vote **for** 'Save-As-You-Earn' schemes in the U.K which allow for no more than a 20% purchase discount, and which otherwise comply with U.K. law and Putnam standards.

France

- Putnam will not apply the U.S. standard 15% discount cap for employee share purchase schemes at French companies. As such, Putnam will generally vote **for** employee share purchase schemes in France that allow for no greater than a 30% purchase discount, or 40% purchase discount if the vesting period is equal to or greater than ten years, and which otherwise comply with French law and Putnam standards.

- Putnam will generally vote **for** the Remuneration Report (established based on SRD II), however Putnam will vote on a **case-by-case** basis when Putnam is voting against both the ex-Post Remuneration Report (CEO) and ex-Ante Remuneration Policy (CEO, or proposal including CEO remuneration package) in the current year, and Putnam's third party service provider(s) is recommending a vote against.

Canada

- Putnam will generally vote **for** Advance Notice provisions for submitting director nominations not less than 30 days prior to the date of the annual meeting. For Advance Notice provisions where the minimum number of days to submit a shareholder nominee is less than 30 days prior to the meeting date, Putnam will vote on a **case-by-case** basis. Putnam will also vote on a **case-by-case** basis if the company's policy expressly prohibits the commencement of a new notice period in the event the originally scheduled meeting is adjourned or postponed**.**

Hong Kong

- Putnam will vote for proposals to approve a general mandate permitting the company to engage in non-pro rata share issuances of up to 20% of total equity in a year if the company's board meets Putnam's independence standards; if the company's board does not meet Putnam's independence standards, then Putnam will vote against these proposals.

- Additionally, Putnam will vote for proposals to approve the reissuance of shares acquired by the company under a share repurchase program, provided that: (1) Putnam supported (or would have supported, in accordance with these guidelines) the share repurchase program, (2) the reissued shares represent no more than 10% of the company's outstanding shares (measured immediately before the reissuance), and (3) the reissued shares are sold for no less than 85% of current market value.

This policy supplements policies regarding share issuances as stated above under section

III. Voting Shares of Non-US Issuers.

Taiwan

- Putnam will vote **against** proposals to release the board of directors from the non-compete restrictions specified in Taiwanese Company Law. However, Putnam will vote **for** such proposals if the directors are engaged in activities with a wholly- owned subsidiary of the company.

Australia

- Putnam will vote **for** proposals to carve out, from the general cap on non-pro rata share issues of 15% of total equity in a rolling 12-month period, a particular proposed issue of shares or a particular issue of shares made previously within the 12-month period, if the company's board meets Putnam's independence standards; if the company's board does not meet Putnam's independence standards, then Putnam will vote **against** these proposals.

- Putnam will vote **for** proposals renewing partial takeover provisions.

- Putnam will vote on a **case-by-case** basis on Board-Spill proposals.

Turkey

- Putnam will vote on a **case-by-case** basis on proposals involving related party transactions. However, Putnam will vote **against** when such proposals do not provide information on the specific transaction(s) to be entered into with the board members or executives.

Exhibit B to Proxy Procedures

PUTNAM INVESTMENTS

PROXY VOTING CONFLICT

OF INTEREST DISCLOSURE FORM

1. *Company name*:_____

2. *Date of Meeting:* _____

3. *Referral Item(s):* _____

4. *Description of Putnam's Business Relationship with Issuer of Proxy which may give rise to a conflict of interest:*_____

    a. _____

5. *Describe procedures used to address any conflict of interest:* _____

6. *Describe any contacts from parties outside Putnam Management (other than routine communications from proxy solicitors) with respect to the referral item not otherwise reported in an investment professional's recommendation:*

__ _____

CERTIFICATION

The undersigned officer of Putnam Investments certifies that, to the best of his or her knowledge, any recommendation of an investment professional provided under circumstances where a conflict of interest exists was made solely on the investment merits and without regard to any other consideration.

_____

Name:

Proxy Voting Team

Exhibit C to Proxy Procedures

PUTNAM INVESTMENTS

PROXY VOTING CONFLICT

OF INTEREST DISCLOSURE FORM

1. *Company name*: _____
2. *Date of Meeting*: _____
3. *Referral Item(s)*: _____
4. *Description of Putnam's Business Relationship with Issuer of Proxy which may give rise to a conflict of interest:* _____None_____
5. *Describe procedures used to address any conflict of interest*: _____N/A_____
6. *Describe any contacts from parties outside Putnam Management (other than routine communications from proxy solicitors) with respect to the referral item not otherwise reported in an investment professional's recommendation*:

None_____

CERTIFICATION

The undersigned officer of Putnam Investments certifies that, to the best of his or her knowledge, any recommendation of an investment professional provided under circumstances where a conflict of interest exists was made solely on the investment merits and without regard to any other consideration.

_____

Name:

Proxy Voting Team