

PUTNAM MANAGED MUNICIPAL INCOME TRUST
Form DEF 14A
August 25, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 14A

(RULE 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

PROXY STATEMENT PURSUANT TO SECTION 14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

Filed by the Registrant / X /

Filed by a Party other than the Registrant / /

Check the appropriate box:

/ / Preliminary Proxy Statement

/ / Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

/ X / Definitive Proxy Statement

/ / Definitive Additional Materials

/ / Soliciting Material Pursuant to Sec. 240.14a-12

PUTNAM MANAGED MUNICIPAL INCOME TRUST

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement,
if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

/ No fee required

/ Fee computed on table below per Exchange Act Rule 14a-6(i)(1) and 0-11

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

/ Fee paid previously with preliminary materials.

/ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Vote today

**Please vote on matters affecting your investment
in Putnam Managed Municipal Income Trust.**

**Turn the page to read an urgent message
from your fund's President and Chair.**

A Message from the President and Chair

Putnam Managed Municipal Income Trust

August 25, 2011

Dear Fellow Shareholder:

We are writing to ask for your vote on an important matter affecting your investment in the Putnam funds. While you are, of course, welcome to join us at your fund's meeting, most shareholders cast their vote by filling out and signing the enclosed proxy card(s), voting via the internet or by calling. We are asking for your vote on the following matter.

Fixing the number of Trustees at 12 and electing your fund's nominees for Trustees.

Although Trustees do not manage fund portfolios, they play an important role in protecting shareholders, and are responsible for approving the fees paid to your fund's investment adviser and its affiliates, reviewing overall fund expenses, selecting the fund's auditors, monitoring conflicts of interest, overseeing the fund's compliance with federal securities laws and voting proxies for the fund's portfolio securities. Consistent with the Investment Company Act of 1940 and Securities and Exchange Commission rules, more than three-quarters of your fund's Trustees currently are independent of the fund and Putnam Investments.

2 Proxy Statement

Please vote today.

Your vote is important to us. Delaying your vote will increase expenses if further mailings are required. If you vote via the Internet or by telephone or complete and return your proxy card(s), your shares will be voted on your behalf exactly as you have instructed. If you simply sign and return your proxy card(s), your shares will be voted in accordance with the Trustees' recommendation.

We appreciate your attention to this important matter. If you have questions about this proposal, please call a customer service representative at 1-800-225-1581 or contact your financial advisor.

Table of contents

Notice of Annual Meeting of Shareholders	5
Trustees' Recommendation	6
The Proposal	7
Further Information About Voting and the Meeting	26
Fund Information	29

PROXY CARD(S) ENCLOSED

If you have any questions, please contact a customer service representative at 1-800-225-1581 or call your financial advisor.

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be held on September 16, 2011.

The proxy statement is available at www.proxyonline.com.

4

Notice of Annual Meeting of Shareholders

To the Shareholders of Putnam Managed Municipal Income Trust:

This is the formal agenda for your fund's shareholder meeting. It tells you what proposal will be voted on and the time and place of the meeting, in the event you attend in person.

The Annual Meeting of Shareholders of your fund will be held on September 16, 2011 at 11:00 a.m., Eastern time, at the principal offices of the fund on the 8th floor of One Post Office Square, Boston, Massachusetts 02109, to consider the following proposal:

1. Fixing the number of Trustees at 12 and electing your fund's nominees for Trustees.

See page 6.

By Judith Cohen, Clerk, and by the Trustees

Jameson A. Baxter, Chair

Ravi Akhoury	Kenneth R. Leibler
Barbara M. Baumann	Robert E. Patterson
Charles B. Curtis	George Putnam, III
Robert J. Darretta	Robert L. Reynolds
John A. Hill	W. Thomas Stephens
Paul L. Joskow	

In order for you to be represented at your fund's shareholder meeting, we urge you to record your voting instructions over the Internet or by telephone or to mark, sign, date, and mail the enclosed proxy card(s) in the postage-paid envelope provided.

August 25, 2011

5

Proxy Statement

This document will give you the information you need to vote on the proposal. Much of the information is required under rules of the Securities and Exchange Commission ("SEC"); some of it is technical. If there is anything you don't understand, please contact a customer service representative toll-free at 1-800-225-1581 or call your financial advisor.

5

Who is asking for your proxy?

Your vote is being solicited by the Trustees of Putnam Managed Municipal Income Trust for use at the Annual Meeting of Shareholders of the fund to be held on September 16, 2011 (the "Meeting") and, if your fund's Meeting is adjourned, at any later session of the Meeting, for the purpose stated in the Notice of Annual Meeting of Shareholders (see previous page 5). The Notice of Annual Meeting of Shareholders, the enclosed proxy card(s) and this proxy statement are being mailed on or about August 25, 2011.

How do your fund's Trustees recommend that shareholders vote on this proposal?

The Trustees recommend that you vote as follows on the proposal included in the Notice of Annual Meeting of Shareholders:

1. FOR fixing the number of Trustees at 12 and electing your fund's nominees for Trustees.

Who is eligible to vote?

Shareholders of record at the close of business on June 20, 2011 (the "Record Date") are entitled to be present and to vote at the Meeting or at any adjourned session of the Meeting.

Each share is entitled to one vote. Unless otherwise noted, the holders of your fund's preferred shares and holders of your fund's common shares will vote as separate classes. Shares represented by a duly executed proxy will be voted in accordance with your instructions. If a duly executed proxy is submitted without filling in a vote on a proposal, your shares will be voted in accordance with the Trustees' recommendation. If any other matters properly come before the meeting, your shares will be voted on such matters in accordance with the judgment of the persons designated on the enclosed proxy card(s).

6

The Proposal

1. ELECTION OF TRUSTEES

The Board Policy and Nominating Committee is responsible for making recommendations concerning the nominees for Trustees of your fund. The Board Policy and Nominating Committee consists solely of Trustees who are not "interested persons" (as defined in the Investment Company Act of 1940, as amended, the "1940 Act") of your fund or of Putnam Investment Management, LLC, your fund's investment manager ("Putnam Management"). Those Trustees who are not "interested persons" of your fund or Putnam Management are referred to as "Independent Trustees" throughout this proxy statement.

Fixing the Number of Trustees and Electing Trustees.

The fund's Amended and Restated Agreement and Declaration of Trust (the "Agreement and Declaration of Trust") requires that shareholders fix the number of Trustees on the fund's Board and elect the fund's Trustees at each annual meeting. The Board of Trustees, based on the recommendation of the Board Policy and Nominating Committee, recommends that shareholders fix the number of Trustees of your fund at 12 and vote for the election of the fund's nominees described in the following pages. In circumstances where, as in the current year, there is no contested election, no Board proposal to increase the size of the Board, or no Board proposal to nominate a greater number of Trustees than are proposed to be elected, the fund has historically treated shareholder action to elect Trustees as also fixing the size of the Board at the number of Trustees so elected. Accordingly, the enclosed proxy card(s) permits shareholders to vote on individual Trustee nominees, but does not include a separate opportunity to vote for or against fixing the number of Trustees at 12.

Pursuant to the bylaws of your fund and the 1940 Act, holders of the preferred shares of your fund, voting as a separate class, are entitled to elect 2 nominees for Trustees. Therefore, Messrs. Hill and Patterson have been

nominated to be elected as Trustees by the holders of the preferred shares, while the other 10 nominees have been nominated to be elected by the holders of the preferred shares and common shares voting together as a single class. Each nominee is currently a Trustee of your fund and of the other Putnam funds.

Who are the nominees for Trustees?

The nominees for Trustees and their backgrounds are shown in the following pages. This information includes each nominee's name, year of birth, principal occupation(s) during the past 5 years, and other information about the nominee's professional background, including other directorships the nominee holds. Please refer to pages 24–25 for a discussion of why the Trustees of your fund unanimously recommend that shareholders vote "FOR" the election of the nominees. The address of all of the Trustees is One Post Office Square, Boston, Massachusetts 02109. As of June 30, 2011, there were 106 Putnam funds.

7

Independent Trustees

**Ravi Akhoury (Born 1947)
Trustee since 2009**

Mr. Akhoury serves as Advisor to New York Life Insurance Company. He is also a Director of Jacob Ballas Capital India (a non-banking finance company focused on private equity advisory services) and is a member of its Compensation Committee. He also serves as a Trustee of the Rubin Museum, serving on the Investment Committee, and of the American India Foundation. Mr. Akhoury is also a Director of RAGE Frameworks, Inc. (a private software company).

Previously, Mr. Akhoury was a Director and on the Compensation Committee of MaxIndia/New York Life Insurance Company in India. He was also Vice President and Investment Policy Committee member of Fischer, Francis, Trees and Watts (a fixed-income portfolio management firm). He has also served on the Board of Bharti Telecom (an Indian telecommunications company), serving as a member of its Audit and Compensation Committees, and as a Director and member of the Audit Committee on the Board of Thompson Press (a publishing company). From 1992 to 2007, he was Chairman and CEO of MacKay Shields, a multi-product investment management firm with over \$40 billion in assets under management.

Mr. Akhoury graduated from the Indian Institute of Technology with a B.S. in Engineering and obtained an M.S. in Quantitative Methods from SUNY at Stony Brook.

**Barbara M. Baumann (Born 1955)
Trustee since 2010**

Ms. Baumann is President and Owner of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.

Ms. Baumann currently serves as a Director of SM Energy Company (a publicly held U.S. exploration and production company), Unisource Energy Corporation (a publicly held electric utility in Arizona), CVR Energy (a publicly held petroleum refiner and fertilizer manufacturer), as well as Cody Resources Management, LLP (a privately held energy, ranching, and commercial real estate company). Ms. Baumann is a Trustee of Mount Holyoke College and serves on the Investment Committee for the college's endowment. She is the former Chair of the Board and a current Board member of Girls Inc. of Metro Denver, and serves on the Finance Committee of The Children's Hospital of Denver.

7

Prior to forming Cross Creek Energy Corporation in 2003, Ms. Baumann was Executive Vice President of Associated Energy Managers, a domestic private equity firm. From 1981 until 2000, she held a variety of financial and operational management positions with the global energy company Amoco Corporation and its successor, BP, most recently serving as Commercial Operations Manager of its Western Business Unit.

8

Ms. Baumann holds an M.B.A. from The Wharton School of the University of Pennsylvania and a B.A. from Mount Holyoke College.

Jameson A. Baxter (Born 1943)

Trustee since 1994, Vice Chair from 2005 to 2011 and Chair since 2011

Ms. Baxter is the President of Baxter Associates, Inc., a private investment firm.

Ms. Baxter serves as Chair of the Mutual Fund Directors Forum, Director of the Adirondack Land Trust and Trustee of the Nature Conservancy's Adirondack Chapter. Until 2011, Ms. Baxter was a director of ASHTA Chemical, Inc. Until 2007, she was a Director of Banta Corporation (a printing and supply chain management company), Ryerson, Inc. (a metals service corporation), and Advocate Health Care. She has also served as a director on a number of other boards, including BoardSource (formerly the National Center for Nonprofit Boards), Intermatic Corporation (a manufacturer of energy control products) and MB Financial. She is Chairman Emeritus of the Board of Trustees of Mount Holyoke College, having served as Chairman for 5 years.

Ms. Baxter has held various positions in investment banking and corporate finance, including Vice President of and Consultant to First Boston Corporation and Vice President and Principal of the Regency Group. She is a graduate of Mount Holyoke College.

Charles B. Curtis (Born 1940)

Trustee since 2001

Mr. Curtis is Former President and Chief Operating Officer of the Nuclear Threat Initiative (a private foundation dealing with national security issues), and serves as Senior Advisor to the Center for Strategic and International Studies.

Mr. Curtis is a member of the Council on Foreign Relations and the National Petroleum Council. He also serves as a Director of Edison International and Southern California Edison. Until 2006, Mr. Curtis served as a member of the Trustee Advisory Council of the Applied Physics Laboratory, Johns Hopkins University.

Mr. Curtis is an attorney with over 15 years in private practice and 19 years in various positions in public service, including service at the Department of Treasury, the U.S. House of Representatives, the Securities and Exchange Commission, the Federal Energy Regulatory Commission and the Department of Energy.

9

Robert J. Darretta (Born 1946)
Trustee since 2007

Mr. Darretta serves as Director of UnitedHealth Group, a diversified health-care company, and as the Health Care Industry Advisor to Permira, a global private equity firm.

Until April 2007, Mr. Darretta was Vice Chairman of the Board of Directors of Johnson & Johnson, one of the world's largest and most broadly based health-care companies. Prior to 2007, he had responsibility for Johnson & Johnson's finance, investor relations, information technology, and procurement functions. He served as Johnson & Johnson Chief Financial Officer for a decade, prior to which he spent two years as Treasurer of the corporation and over 10 years leading various Johnson & Johnson operating companies.

Mr. Darretta received a B.S. in Economics from Villanova University.

John A. Hill (Born 1942)
Trustee since 1985 and Chairman from 2000 to 2011

Mr. Hill is founder and Vice-Chairman of First Reserve Corporation, the leading private equity buyout firm specializing in the worldwide energy industry, with offices in Greenwich, Connecticut; Houston, Texas; London, England; and Shanghai, China. The firm's investments on behalf of some of the nation's largest pension and endowment funds are currently concentrated in 31 companies with annual revenues in excess of \$15 billion, which employ over 100,000 people in 23 countries.

Mr. Hill is a Director of Devon Energy Corporation (a leading independent natural gas and oil exploration and production company) and various private companies owned by First Reserve, and serves as a Trustee of Sarah Lawrence College where he serves as Chairman and also chairs the Investment Committee. He is also a member of the Advisory Board of the Millstein Center for Corporate Governance and Performance at the Yale School of Management.

Prior to forming First Reserve in 1983, Mr. Hill served as President of F. Eberstadt and Company, an investment banking and investment management firm. Between 1969 and 1976, Mr. Hill held various senior positions in Washington, D.C. with the federal government, including Deputy Associate Director of the Office of Management and Budget and Deputy Administrator of the Federal Energy Administration during the Ford Administration.

Born and raised in Midland, Texas, he received his B.A. in Economics from Southern Methodist University and pursued graduate studies as a Woodrow Wilson Fellow.

10

Paul L. Joskow (Born 1947)
Trustee since 1997

Dr. Joskow is an economist and President of the Alfred P. Sloan Foundation (a philanthropic institution focused primarily on research and education on issues related to science, technology, and economic performance). He is the Elizabeth and James Killian Professor of Economics, Emeritus at the Massachusetts Institute of Technology (MIT), where he joined the faculty in 1972. Dr. Joskow was the Director of the Center for Energy and Environmental Policy Research at MIT from 1999 through 2007.

Dr. Joskow serves as a Trustee of Yale University, as a Director of TransCanada Corporation (an energy company focused on natural gas transmission and power services) and of Exelon Corporation (an energy company focused

on power services), and as a member of the Board of Overseers of the Boston Symphony Orchestra. Prior to August 2007, he served as a Director of National Grid (a UK-based holding company with interests in electric and gas transmission and distribution and telecommunications infrastructure). Prior to July 2006, he served as President of the Yale University Council. Prior to February 2005, he served on the Board of the Whitehead Institute for Biomedical Research (a non-profit research institution). Prior to February 2002, he was a Director of State Farm Indemnity Company (an automobile insurance company), and prior to March 2000, he was a Director of New England Electric System (a public utility holding company).

Dr. Joskow has published seven books and numerous articles on industrial organization, government regulation of industry, and competition policy. He is active in industry restructuring, environmental, energy, competition, and privatization policies — having served as an advisor to governments and corporations worldwide. Dr. Joskow holds a Ph.D. and M.Phil. from Yale University and a B.A. from Cornell University.

Kenneth R. Leibler (Born 1949)
Trustee since 2006

Mr. Leibler is a founder and former Chairman of the Boston Options Exchange, an electronic marketplace for the trading of derivative securities.

Mr. Leibler currently serves as Vice Chairman of the Board of Trustees of Beth Israel Deaconess Hospital in Boston. He is also a Director of Northeast Utilities, which operates New England's largest energy delivery system, and, until November 2010, was a Director of Ruder Finn Group, a global communications and advertising firm. Prior to December 2006, he served as a Director of the Optimum Funds group. Prior to October 2006, he served as a Director of ISO New England, the organization responsible for the operation of the electric generation system in the New England states. Prior to 2000, Mr. Leibler was a Director of the Investment Company Institute in Washington, D.C.

11

Prior to January 2005, Mr. Leibler served as Chairman and Chief Executive Officer of the Boston Stock Exchange. Prior to January 2000, he served as President and Chief Executive Officer of Liberty Financial Companies, a publicly traded diversified asset management organization. Prior to June 1990, Mr. Leibler served as President and Chief Operating Officer of the American Stock Exchange (AMEX), and at the time was the youngest person in AMEX history to hold the title of President. Prior to serving as AMEX President, he held the position of Chief Financial Officer, and headed its management and marketing operations. Mr. Leibler graduated with a degree in Economics from Syracuse University.

Robert E. Patterson (Born 1945)
Trustee since 1984

Mr. Patterson is Senior Partner of Cabot Properties, LP and Co-Chairman of Cabot Properties, Inc. (a private equity firm investing in commercial real estate).

Mr. Patterson is past Chairman and served as a Trustee of the Joslin Diabetes Center. He previously was a Trustee of the Sea Education Association. Prior to December 2001, Mr. Patterson was President and Trustee of Cabot Industrial Trust (a publicly traded real estate investment trust). Prior to February 1998, he was Executive Vice President and Director of Acquisitions of Cabot Partners Limited Partnership (a registered investment adviser involved in institutional real estate investments). Prior to 1990, he served as Executive Vice President of Cabot, Cabot & Forbes Realty Advisors, Inc. (the predecessor company of Cabot Partners).

10

Mr. Patterson practiced law and held various positions in state government, and was the founding Executive Director of the Massachusetts Industrial Finance Agency. Mr. Patterson is a graduate of Harvard College and Harvard Law School.

**George Putnam, III (Born 1951)
Trustee since 1984**

Mr. Putnam is Chairman 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). Mr. Putnam founded the New Generation companies in 1986.

Mr. Putnam is a Director of The Boston Family Office, LLC (a registered investment adviser). He is a Trustee of Epiphany School and a Trustee of the Marine Biological Laboratory in Woods Hole, Massachusetts. Prior to June 2007, Mr. Putnam was President of the Putnam Funds. Until 2010, he was Trustee of St. Mark's School, until 2006, he was a Trustee of Shore Country Day School, and until 2002, he was a Trustee of the Sea Education Association.

Mr. Putnam previously worked as an attorney with the law firm of Dechert LLP (formerly known as Dechert Price & Rhoads) in Philadelphia. He is a graduate of Harvard College, Harvard Business School, and Harvard Law School.

12

**W. Thomas Stephens (Born 1942)
Trustee from 1997 to 2008, and since 2009**

Mr. Stephens retired as Chairman and Chief Executive Officer of Boise Cascade, LLC (a paper, forest products and timberland assets company) in December 2008.

Mr. Stephens is a Director of TransCanada Pipelines, Ltd. (an energy infrastructure company). Until 2010, Mr. Stephens was a Director of Boise Inc. (a manufacturer of paper and packaging products). Until 2004, Mr. Stephens was a Director of Xcel Energy Incorporated (a public utility company), Qwest Communications and Norske Canada, Inc. (a paper manufacturer). Until 2003, Mr. Stephens was a Director of Mail-Well, Inc. (a diversified printing company). He served as Chairman of Mail-Well until 2001 and as CEO of MacMillan-Bloedel, Ltd. (a forest products company) until 1999.

Prior to 1996, Mr. Stephens was Chairman and Chief Executive Officer of Johns Manville Corporation (a manufacturing company). He holds B.S. and M.S. degrees from the University of Arkansas.

Interested Trustee

**Robert L. Reynolds* (Born 1952)
Trustee since 2008 and President of the Putnam Funds since
July 2009**

Mr. Reynolds is President and Chief Executive Officer of Putnam Investments, a member of Putnam Investments' Executive Board of Directors, and President of the Putnam Funds. He has more than 30 years of investment and financial services experience.

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

Prior to joining Putnam Investments in 2008, Mr. Reynolds was Vice Chairman and Chief Operating Officer of Fidelity Investments from 2000 to 2007. During this time, he served on the Board of Directors for FMR Corporation, Fidelity Investments Insurance Ltd., Fidelity Investments Canada Ltd., and Fidelity Management Trust Company. He was also a Trustee of the Fidelity Family of Funds. From 1984 to 2000, Mr. Reynolds served in a number of increasingly responsible leadership roles at Fidelity.

Mr. Reynolds serves on several not-for-profit boards, including those of the West Virginia University Foundation, Concord Museum, Dana-Farber Cancer Institute, Lahey Clinic, and Initiative for a Competitive Inner City in Boston. He is a member of the Chief Executives Club of Boston, the National Innovation Initiative, and the Council on Competitiveness, and he is a former President of the Commercial Club of Boston.

Mr. Reynolds received a B.S. in Business Administration/Finance from West Virginia University.

* Nominee who is an "interested person" of the fund, Putnam Management and/or Putnam Retail Management Limited Partnership ("Putnam Retail Management"). Mr. Reynolds is deemed an "interested person" by virtue of his position as an officer of the fund, Putnam Management and/or Putnam Retail Management. Mr. Reynolds is the President and Chief Executive Officer of Putnam Investments and the President of the Putnam Funds.

13

Each of the fund's Trustees was most recently elected by shareholders of the fund on September 10, 2010, 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. In recommending the election or appointment of the current 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. In the case of most members of the Board, this included their previous service as a member of the Board of Trustees of the Putnam funds, during which they have demonstrated a high level of diligence and commitment to the interests of fund shareholders and the 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:

Ravi Akhoury — Mr. Akhoury's experience as chairman and CEO of a major investment management organization.

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 three NYSE companies.

Jameson A. Baxter — Ms. Baxter's experience in corporate finance acquired in the course of her career at a major investment bank, her experience as a director and audit committee chair of two NYSE companies and her role as Chair of the Mutual Fund Directors Forum.

Charles B. Curtis — Mr. Curtis's experience in public and regulatory policy matters relating to energy and finance acquired in the course of his service in various senior positions in government and on numerous boards of public and private organizations.

Robert J. Darretta — Mr. Darretta's experience as the Chief Financial Officer and vice chairman of the Board of a major NYSE health products company.

John A. Hill — Mr. Hill's experience as founder and chairman of a major open-end mutual fund and as a founder and lead managing partner of one of the largest private equity firms in the United States.

Paul L. Joskow — Dr. Joskow's education and experience as a professional economist familiar with financial economics and related issues and his service on multiple for-profit boards.

12

Kenneth R. Leibler — Mr. Leibler’s extensive experience in the financial services industry, including as CEO of a major asset management organization, and his service as a director of various public and private companies.

14

Robert E. Patterson — Mr. Patterson’s training and experience as an attorney and his experience as president of a NYSE company.

George Putnam, III — Mr. Putnam’s training and experience as an attorney, his experience as the founder and CEO of an investment management firm and his experience as an author of various publications on the subject of investments.

Robert L. Reynolds — Mr. Reynolds’s extensive experience as a senior executive of one of the largest mutual fund organizations in the United States and his current role as the President and CEO of Putnam Investments.

W. Thomas Stephens — Mr. Stephens’s extensive business experience, including his service as CEO of four public companies, as non-executive chairman of two public companies and as a director of numerous other public companies.

Each of the nominees has agreed to serve as a Trustee, if elected. If any of the nominees is unavailable for election at the time of the Meeting, which is not anticipated, the Trustees may vote for other nominees at their discretion, or the Trustees may fix the number of Trustees at fewer than 12 for your fund. Each Trustee serves until the election and qualification of his or her successor, or until he or she sooner dies, resigns, retires or is removed.

What are the Trustees’ responsibilities?

Your fund’s Trustees are responsible for the general oversight of your fund’s affairs and for assuring that your fund is managed in the best interests of its shareholders. The Trustees regularly review your fund’s investment performance as well as the quality of other services provided to your fund and its shareholders by Putnam Management and its affiliates, including administration, distribution and shareholder servicing. At least annually, the Trustees review and evaluate the fees and operating expenses paid by your fund for these services and negotiate changes that they deem appropriate. In carrying out these responsibilities, the Trustees are assisted by an independent administrative staff and by your fund’s auditors, independent counsel and other experts as appropriate, selected by and responsible to the Trustees.

Board Leadership Structure. Currently, 11 of the 12 Trustees of your fund are Independent Trustees. These Independent Trustees must vote separately to approve all financial arrangements and other agreements with your fund’s investment manager and other affiliated parties. The role of the 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. An Independent Trustee currently serves as chair of the Board.

Board Committees. 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. Certain committees (the Executive Committee, Distributions Committee, and Audit and Compliance Committee) are authorized to act

15

for the Trustees as specified in their charters. The other committees 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 auditors as well as other experts. The committees meet as often as necessary, either in conjunction with regular meetings of the Trustees or otherwise. The membership and

13

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 fund's investment manager, the Trustees regularly receive reports regarding investment risks and compliance risks. 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 fund's investment manager how it monitors and controls such risks.

Audit and Compliance Committee. The Audit and Compliance Committee provides oversight on matters relating to the preparation of the fund's financial statements, compliance matters, internal audit functions, and Codes of Ethics issues. This oversight is discharged by regularly meeting with management and the fund's independent auditors and keeping current on industry developments. Duties of this Committee also include the review and evaluation of all matters and relationships pertaining to the fund's independent auditors, including their independence. Information about the fees billed to the fund by the fund's independent auditors, as well as information about the Committee's pre-approval policies relating to the work performed by the fund's independent auditors, is included on pages 30–32 of this proxy statement. 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 New York Stock Exchange. The Board of Trustees has adopted a written charter for the Committee, a current copy of which is available at putnam.com/individual. The Committee currently consists of Messrs. Leibler (Chairperson), Curtis, Darretta, and Hill and Ms. Baumann.

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 Putnam funds. The Committee also oversees the voting of proxies associated with portfolio investments of the Putnam funds, with the goal of ensuring that these proxies are voted in the best interest of the fund's shareholders.

16

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 also identifies prospective nominees for election as Trustee by considering individuals that come to its attention through the recommendation of current Trustees, Putnam Management or shareholders. Candidates properly submitted by shareholders (as described below) will be considered and evaluated on the same basis as candidates recommended by other sources. The Committee may, but is not required to, engage a third-party professional search firm to assist it in identifying and evaluating potential nominees.

When evaluating a potential candidate for membership on the Board of Trustees, the Committee considers the skills and characteristics that it determines would most benefit the Putnam funds at the time the evaluation is made. The Committee may take into account a wide variety of attributes in considering potential Trustee candidates, including, but not limited to: (i) availability and commitment of a candidate to attend meetings and perform his or her responsibilities to the Board of Trustees, (ii) other board experience, (iii) relevant industry and related experience, (iv) educational background, (v) financial expertise, (vi) an assessment of the candidate's ability, judgment and expertise, (vii) an assessment of the perceived needs of the Board of Trustees and its committees at that point in time and (viii) overall Board of Trustees composition. 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. In connection with this evaluation, the Committee will determine whether to interview prospective nominees, and, if warranted, one or more members of the Committee, and other Trustees and representatives of the funds, as appropriate, will interview prospective nominees in person or by telephone. Once this evaluation is completed, the Committee recommends such candidates as it determines appropriate to the Independent Trustees for nomination, and the Independent Trustees select the nominees after considering the recommendation of the Committee.

The Committee will consider nominees for Trustee recommended by shareholders of your fund provided shareholders submit their recommendations by the date disclosed in the paragraph entitled "Date for receipt of shareholders' proposals for the next annual meeting" in the section "Further Information About Voting and the Meeting," and provided the shareholders' recommendations otherwise comply with applicable securities laws, including Rule 14a-8 under the Exchange Act.

The Committee consists only of Independent Trustees. The Trustees have adopted a written charter for the Board Policy and Nominating Committee, a current copy of which is available at putnam.com/individual. The Board Policy and Nominating Committee currently consists of Messrs. Hill (Chairperson), Curtis, Patterson and Putnam, and Ms. Baxter.

17

Brokerage Committee. The Brokerage Committee reviews the Putnam funds' policies regarding the execution of portfolio trades and Putnam Management's 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 Putnam Management to obtain brokerage and research services generally useful to it 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 currently consists of Dr. Joskow (Chairperson), Ms. Baxter, and Messrs. Akhoury, Patterson, Putnam and Stephens.

Contract Committee. The Contract Committee reviews and evaluates at least annually all arrangements pertaining to (i) the engagement of Putnam Management and its affiliates to provide services to the Putnam 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 Putnam Management and its affiliates or where Putnam Management or its affiliates have a material interest. The Committee also reviews the proposed organization of new fund products, proposed structural changes to existing funds and matters relating to closed-end funds. The Committee reports and makes recommendations to the Trustees regarding these matters. The Committee currently consists of Mr. Patterson (Chairperson), Dr. Joskow, Messrs. Akhoury, Putnam and Stephens, and Ms. Baxter.

Distributions Committee. The Distributions Committee oversees all dividends and distributions by the Putnam funds. The Committee makes recommendations to the Trustees of the funds regarding the amount and timing of distributions paid by the funds, and determines such matters when the Trustees are not in session. The Committee also oversees the policies and procedures pursuant to which Putnam Management prepares recommendations for distributions, and meets regularly with representatives of Putnam Management 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 currently consists of Ms. Baumann (Chairperson), and Messrs. Curtis, Darretta, Hill, and Leibler.

18

Executive Committee. The functions of the Executive Committee are twofold. The first is to ensure that the Putnam 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 establish annual and ongoing goals, objectives and priorities for the Board of Trustees and to ensure coordination of all efforts between the Trustees and Putnam Management on behalf of the shareholders of the funds. The Committee currently consists of Ms. Baxter (Chairperson), and Messrs. Hill, Patterson and Putnam.

15

Investment Oversight Committees. The Investment Oversight Committees regularly meet with investment personnel of Putnam Management to review the investment performance and strategies of the Putnam funds in light of their stated investment objectives 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. Investment Oversight Committee A currently consists of Messrs. Akhoury (Chairperson), Darretta, Hill, Patterson and Reynolds, and Ms. Baxter. Investment Oversight Committee B currently consists of Messrs. Putnam (Chairperson), Curtis, Leibler and Stephens, Dr. Joskow, and Ms. Baumann.

Pricing Committee. The Pricing Committee oversees the valuation of assets of the Putnam funds and reviews the funds' policies and procedures for achieving accurate and timely pricing of fund shares. The Committee also oversees implementation of these policies, including fair value determinations of individual securities made by Putnam Management or other designated agents of the funds. The Committee also oversees compliance by money market funds with Rule 2a-7 and the correction of occasional pricing errors. The Committee also reviews matters related to the liquidity of portfolio holdings. The Committee reports to the Trustees and makes recommendations to the Trustees regarding these matters. The Committee currently consists of Messrs. Darretta (Chairperson), Curtis, Hill and Leibler, and Ms. Baumann.

How large a stake do the Trustees have in the Putnam family of funds?

The Trustees allocate their investments among the Putnam funds based on their own investment needs. The table below shows the number of shares beneficially owned by each nominee for Trustee and the value of each nominee's holdings in the fund and in all of the Putnam funds as of June 30, 2011. As a group, the Trustees owned shares of the Putnam funds valued at approximately \$70 million as of June 30, 2011.

19

Name of Nominee	Dollar Range of Putnam Managed Municipal Income Trust Common Shares Owned	Common Shares of Putnam Managed Municipal Income Trust Beneficially Owned	Aggregate Dollar Range of Shares Held in All of the Putnam Funds Overseen by Trustee
Ravi Akhoury	\$1-\$10,000	100.000	Over \$100,000
Barbara M. Baumann	\$1-\$10,000	100.000	Over \$100,000
Jameson A. Baxter	\$1-\$10,000	539.178	Over \$100,000
Charles B. Curtis	\$1-\$10,000	292.257	Over \$100,000
Robert J. Darretta	\$1-\$10,000	100.000	Over \$100,000
John A. Hill	\$1-\$10,000	324.663	Over \$100,000
Paul L. Joskow	\$1-\$10,000	195.000	Over \$100,000

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

Kenneth R. Leibler	\$1-\$10,000	195.000	Over \$100,000
Robert E. Patterson	\$1-\$10,000	587.000	Over \$100,000
George Putnam, III	\$10,001-\$50,000	3,815.000	Over \$100,000
W. Thomas Stephens	\$1-\$10,000	100.000	Over \$100,000
Robert L. Reynolds*	\$1-\$10,000	100.000	Over \$100,000

* Trustee who is an "interested person" (as defined in the 1940 Act) of the fund, Putnam Management and/or Putnam Retail Management. Mr. Reynolds is deemed an "interested person" by virtue of his positions as an officer of the fund, Putnam Management and/or Putnam Retail Management. Mr. Reynolds is the President and Chief Executive Officer of Putnam Investments, LLC and President of your fund and each of the other Putnam funds. None of the other Trustees is an "interested person."

As of June 30, 2011, none of the Trustees owned any preferred shares of the fund.

At June 30, 2011, the Trustees and officers of the fund, as a group, owned less than 1% of the fund's outstanding common shares on that date.

How can shareholders communicate with the Trustees?

The Board of Trustees provides a process for shareholders to send communications to the Trustees. Shareholders may direct communications to the Board of Trustees as a whole or to specified individual Trustees by submitting them in writing to the following address:

The Putnam Funds
Attention: "Board of Trustees" or any specified Trustee(s)
One Post Office Square
Boston, Massachusetts 02109

Written communications must include the shareholder's name, be signed by the shareholder, refer to the Putnam fund(s) in which the shareholder holds shares and include the class and number of shares held by the shareholder as of a recent date. Representatives of the fund's transfer agent will review all communications sent to Trustees and, as deemed appropriate, will provide copies and/or summaries of communications to the Trustees.

20

How often do the Trustees meet?

The Trustees hold regular meetings nine times a year, usually over a two-day period, to review the operations of the Putnam funds. A portion of these meetings is devoted to meetings of various committees of the Board that focus on particular matters. Each Trustee generally attends at least two formal committee meetings during each regular meeting of the Trustees. In addition, the Trustees meet in small groups with senior investment personnel and portfolio managers to review recent performance and the current investment climate for selected funds. These meetings ensure that fund performance is reviewed in detail at least once a year. The committees of the Board, including the Executive Committee, may also meet on special occasions as the need arises. During calendar year

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

2010, the average Trustee participated in approximately 49 committee and Board meetings.

The number of times each committee met during your fund's last fiscal year is shown in the table below:

Fiscal year ended October 31, 2010

Audit and Compliance Committee	11
Board Policy and Nominating Committee	7
Brokerage Committee	6
Communications, Service and Marketing Committee†	2
Contract Committee	12
Distributions Committee	9
Executive Committee	1
Investment Oversight Committees	
Investment Oversight Committee A	8
Investment Oversight Committee B	8
Investment Oversight Committee C†	7
Investment Oversight Committee D†	7
Investment Oversight Committee E†	7
Investment Oversight Coordinating Committee†	4
Pricing Committee	7

† As of July 1, 2010, the Board's committee structure changed, resulting in the elimination of these committees.

Your fund does not have a policy with respect to Trustee attendance at shareholder meetings. While various Trustees may attend shareholder meetings from time to time, your fund's Trustees did not attend the last annual meeting of your fund. The Trustees were generally represented at the meeting by their independent staff and independent counsel.

What are the Trustees paid for their services?

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

Each Independent Trustee of the fund receives an annual retainer fee and an additional fee for each Trustees' meeting attended. Independent Trustees also are reimbursed for expenses they incur relating to their service 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 Trustee meeting. The table on page 23 includes the year each Trustee became a Trustee of the Putnam funds, the fees paid to each of those Trustees by your fund for its most recent fiscal year ended October 31, 2010 and the fees paid to each of those Trustees by all of the Putnam funds during calendar year 2010.

Under a Retirement Plan for Trustees of the Putnam funds (the Plan), each Trustee elected before 2004 who retires with at least 5 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) 10 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.

22

Trustees/Year	Aggregate compensation from Putnam Managed Municipal Income Trust	Pension or retirement benefits accrued as part of fund expenses	Estimated annual benefits from all Putnam funds upon retirement (1)	Total compensation from all Putnam funds (2)
Ravi Akhoury/2009	\$1,792	N/A	N/A	\$284,500
Barbara M. Baumann (3)(4)	\$696	N/A	N/A	\$109,500
Jameson A. Baxter/1994 (4)	\$1,823	\$271	\$110,500	\$289,500
Charles B. Curtis/2001	\$1,761	\$187	\$113,900	\$279,500
Robert J. Darretta/2007(4)	\$1,823	N/A	N/A	\$289,500
Myra R. Drucker/2004 (4)(5)	\$1,823	N/A	N/A	\$289,500

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

John A. Hill/1985 (4)(6)	\$2,180	\$461	\$161,700	\$346,063
Paul L. Joskow/1997 (4)	\$1,823	\$181	\$113,400	\$289,500
Elizabeth T. Kennan/1982 (5)	\$1,127	\$361	\$108,000	\$180,000
Kenneth R. Leibler/2006	\$1,823	N/A	N/A	\$289,500
Robert E. Patterson/1984	\$1,823	\$261	\$106,500	\$289,500
George Putnam, III/1984	\$1,823	\$240	\$130,300	\$289,500
W. Thomas Stephens/1997 (7)	\$1,823	\$196	\$107,100	\$289,500
Richard B. Worley/2004 (5)	\$1,761	N/A	N/A	\$279,500
Robert L. Reynolds/2008 (8)	N/A	N/A	N/A	N/A

(1) Estimated benefits for each Trustee are based on Trustee fee rates for calendar years 2003, 2004 and 2005.

(2) As of December 31, 2010, there were 104 funds in the Putnam family.

(3) Ms. Baumann was elected to the Board of Trustees of the Putnam funds effective July 1, 2010.

(4) Certain Trustees are also owed compensation deferred pursuant to a Trustee Compensation Deferral Plan. As of October 31, 2010, the total amounts of deferred compensation payable by the fund, including income earned on such amounts, to these Trustees were: Ms. Baxter — \$7,871.15; Ms. Drucker — \$2,696.74; Mr. Hill — \$28,553.96; and Dr. Joskow — \$7,017.77.

(5) Dr. Kennan, Mr. Worley, and Ms. Drucker retired from the Board of Trustees of the Putnam funds effective June 30, 2010, December 14, 2010, and January 30, 2011, respectively. Upon Dr. Kennan's retirement, she became eligible to receive annual retirement benefit payments from the fund's commencing on January 15, 2011.

(6) Includes additional compensation to Mr. Hill for service as Chairman of the Trustees of the Putnam funds. Ms. Baxter replaced Mr. Hill as Chair of the Trustees of the Putnam funds on July 1, 2011.

(7) Mr. Stephens, who retired from the Board of Trustees of the Putnam funds on March 31, 2008, was re-elected to the Board of Trustees on May 14, 2009. Upon his retirement, Mr. Stephens became entitled to receive annual retirement benefit payments from the funds commencing on January 15, 2009. In connection with his re-election to the Board of Trustees, Mr. Stephens has agreed to suspend the balance of his retirement benefit payments for the duration of his service as a Trustee.

(8) Mr. Reynolds is an "interested person" of the fund, Putnam Management and/or Putnam Retail Management.

The fund's Board has concluded that re-election of the current Trustees is in the best interests of the fund because they will fairly and objectively consider the interests of all shareholders in determining the future direction of the fund, including the interests of those shareholders who have purchased fund shares seeking a long-term investment opportunity and the special advantages provided by the closed-end fund structure.

The Trustees of your fund unanimously recommend that shareholders vote "FOR" the election of your fund's nominees.

Why should you vote for your fund's nominees?

Your current Trustees are independent, experienced, and highly qualified fiduciaries who exercise strong fund governance practices.

Independent

- The Chair of your fund, Jameson Baxter, is independent of Putnam Management and has served on the fund's Board of Trustees for over 17 years. She also serves as the Chairman of the Mutual Fund Directors Forum, which serves investment company directors, promotes vigilant, dedicated and well-informed independent directors, and serves as their voice and advocate on important policy matters;
- 11 of the 12 Trustees are independent of Putnam Management; and
- The Independent Trustees are assisted by an independent administrative staff and by auditors and legal counsel who are selected by the Independent Trustees and are independent of Putnam Management.

Highly Qualified

- The Trustees have significant current and past related industry experience, and have a demonstrated history of actively pursuing the interests of the fund's shareholders;
- The Board includes individuals with substantial professional accomplishments and prior experience in a variety of fields, including investment management, economics, finance, energy, health care, manufacturing, national security, real estate, and telecommunications; and
- The Board has taken actions that directly benefit shareholders — liquidity events such as mergers and tender offers when in the best interests of all shareholders; a share repurchase program that has made a meaningful contribution to investment return; and management fee decreases (including a significant decrease in your fund's management fee in 2006).

Strong Governance Practices

- The Board includes a combination of long-tenured and newer members, bringing diverse perspectives to fund oversight;

24

- The Board has a well-established committee and oversight structure for Putnam funds, including your fund, which has been developed over a long period of time; and
- The fund does not have a staggered board structure or other takeover defenses. Rather every Trustee stands for election at each annual meeting of shareholders.

What are some of the ways in which the Trustees represent shareholder interests?

Among other ways, the Trustees seek to represent shareholder interests:

- by carefully reviewing your fund's investment performance on an individual basis with your fund's investment personnel;
- by discussing with senior management of Putnam Management steps being taken to address any performance deficiencies;
- by carefully reviewing the quality of the various other services provided to your fund and its shareholders by Putnam Management and its affiliates;
- by reviewing in depth the fees paid by your fund and by negotiating with Putnam Management to ensure that such fees remain reasonable and competitive with those of comparable funds, while at the same time providing Putnam Management sufficient resources to continue to provide high quality services in the future;
- by reviewing brokerage costs and fees, allocations among brokers, soft dollar expenditures and similar expenses of your fund;
- by actively addressing the specific concerns of closed-end fund shareholders;
- by monitoring potential conflicts of interest between the Putnam funds, including your fund, and Putnam Management and its affiliates to ensure that the funds continue to be managed in the best interests of their shareholders; and
- by monitoring potential conflicts among funds managed by Putnam Management to ensure that shareholders continue to realize the benefits of participation in a large and diverse family of funds.

What is the voting requirement for electing Trustees?

If a quorum is present at the Meeting, the 2 nominees for election as Trustees by the holders of the preferred shares, voting as a separate class, who receive a plurality vote, meaning the greatest number of affirmative votes cast by holders of the preferred shares, voting as a separate class, will be elected as Trustees, and the 10 nominees for election as Trustees by the holders of the preferred shares and common shares voting together as a single class who receive a plurality vote, meaning the greatest number of affirmative votes cast by the holders of the preferred shares and common shares voting together as a single class, will be elected as Trustees. The fund will deem votes in favor of the Trustees as affirmative votes to fix the number of Trustees at 12. Each preferred shareholder and each common shareholder will be entitled to one vote for each share held.

Further Information About Voting and the Meeting

Quorum and Methods of Tabulation. A majority of the shares entitled to vote constitutes a quorum for the transaction of business with respect to any proposal at the Meeting, except that, where the preferred shares or common shares shall vote as separate classes, then a majority of the aggregate number of shares of each class shall be necessary to constitute a quorum for the transaction of business by that class. Any lesser number is sufficient for adjournments. Votes cast by proxy or in person at the Meeting will be counted by persons your fund appoints as tellers for the Meeting. The tellers will count the total number of votes cast "for" approval of a proposal for purposes of determining whether sufficient affirmative votes have been cast. Shares represented by proxies that reflect abstentions and "broker non-votes" (i.e., shares held by brokers or nominees as to which (i) instructions

have not been received from the beneficial owners or the persons entitled to vote and (ii) the broker or nominee does not have the discretionary voting power on a particular matter) will be counted as shares that are present and entitled to vote on the matter for purposes of determining the presence of a quorum. Neither abstentions nor broker non-votes have an effect on the outcome of the proposal.

Shareholders who object to any proposal in this proxy statement will not be entitled under Massachusetts law or your fund's Agreement and Declaration of Trust to demand payment for, or an appraisal of, their shares.

Special Rule for Proportional Voting of Preferred Shares. For funds listed on the New York Stock Exchange that have outstanding preferred shares, such as the fund, in accordance with the rules of the exchange, brokerage firms may vote for (or against) a proposal, on behalf of their clients who beneficially own the remarketed or auction rate preferred shares and from whom they have not received voting instructions, in the same proportion as votes for (and against) such proposal have been received from holders of preferred shares if (i) the holders of a minimum of 30% of the outstanding preferred shares have been voted by the holders of preferred shares, (ii) the holders of less than 10% of the outstanding preferred shares have voted against such proposal and (iii) the holders of the common shares have approved such proposal.

Other business. The Trustees know of no matters other than those described in this proxy statement to be brought before the Meeting. If, however, any other matters properly come before the Meeting, proxies will be voted on these matters in accordance with the judgment of the persons named in the enclosed proxy card(s).

26

Solicitation of proxies. In addition to soliciting proxies by mail, Trustees of your fund and employees of Putnam Management, Putnam Investor Services, Inc., and Putnam Retail Management Limited Partnership, as well as their agents, may solicit proxies in person or by telephone. Your fund may arrange to have a proxy solicitation firm call you to record your voting instructions by telephone. Shareholders would be called at the phone number Putnam Management has in its records for their accounts and would be given an opportunity to authenticate their identities and to authorize the proxies to vote their shares at the Meeting in accordance with their instructions. To ensure that shareholders' instructions have been recorded correctly, they will also receive a confirmation of their instructions in the mail. A special toll-free number will be available in case the information contained in the confirmation is incorrect. Your fund has been advised by counsel that these procedures are consistent with the requirements of applicable law. If these procedures were subject to a successful legal challenge, such votes would not be counted at the Meeting. Your fund is unaware of any such challenge at this time.

Shareholders have the opportunity to submit their voting instructions over the Internet by using a program provided by a third-party vendor hired by Putnam Management, or by automated telephone service. To use the Internet, please access the Internet address listed on the proxy card and follow the instructions on the Internet site. To record your voting instructions using the automated telephone service, call the toll-free number listed on your proxy card. The Internet and telephone voting procedures are designed to authenticate shareholder identities, to allow shareholders to authorize the voting of their shares in accordance with their instructions, and to confirm that shareholders' instructions have been recorded properly. Shareholders voting over the Internet should understand that there may be costs associated with electronic access, such as usage charges from Internet access providers and telephone companies, that must be borne by the shareholders.

Your fund's Trustees have adopted a general policy of maintaining confidentiality in the voting of proxies. Consistent with this policy, your fund may solicit proxies from shareholders who have not voted their shares or who have abstained from voting, including brokers and nominees.

Persons holding shares as nominees will, upon request, be reimbursed for their reasonable expenses in soliciting instructions from their principals. The fund has retained at its own expense The Altman Group, Inc., 60 East 42nd Street, New York, NY 10165, to aid in the solicitation of instructions for registered and nominee accounts, for a fee not to exceed \$1,000, plus reasonable out-of-pocket expenses. The expenses of the preparation of proxy statements and related materials, including printing, delivery and solicitation costs, are being borne by the fund.

Revocation of proxies. Giving your proxy, whether by returning the proxy card(s) or providing voting instructions over the Internet or by telephone, does not affect your right to attend the Meeting and vote in person. Proxies, including proxies given by telephone or over the Internet, may be revoked at any time before they are voted either (i) by a written revocation received by the Clerk of your fund, (ii) by properly executing and submitting a later-dated proxy, (iii) by recording later-dated voting instructions by telephone or over the Internet, or (iv) by attending the Meeting and voting in person. If your shares are held in street name through a bank, broker or other financial intermediary, please check your voting instruction form or contact your bank, broker or other financial intermediary for instructions on how to change or revoke your vote.

Date for receipt of shareholder proposals for the next annual meeting. It is currently anticipated that your fund's next annual meeting of shareholders will be held in September 2012. The Trustees of your fund reserve the right to set an earlier or later date for the annual meeting for the 2011-2012 fiscal year. Shareholder proposals to be included in the proxy statement for that meeting must be received by your fund on or before April 27, 2012. In order for a shareholder proposal to be included in the proxy statement, both the submitting shareholder and the proposal itself must satisfy the requirements set forth in Rule 14a-8 under the Exchange Act. Shareholders who wish to make a proposal at the annual meeting for the 2011-2012 fiscal year — other than one that will be included in the fund's proxy materials — should notify the fund no later than July 11, 2012. The fund may exclude from the proxy materials and consideration at a meeting certain proposals as permitted by SEC rules and state law. Shareholders who wish to propose one or more nominees for election as Trustees, or to make a proposal fixing the number of Trustees, at the 2012 annual meeting must provide written notice to the fund (including all required information) so that such notice is received in good order by the fund no earlier than June 18, 2012 and no later than July 18, 2012.

Adjournment. If sufficient votes in favor of a proposal set forth in the Notice of Annual Meeting of Shareholders are not received by the time scheduled for the Meeting or if the quorum required for a proposal has not been met, the persons named as proxies may propose adjournments of the Meeting for a period or periods of not more than 60 days in the aggregate to permit further solicitation of proxies. Any adjournment will require the affirmative vote of a majority of the votes cast on the question in person or by proxy at the session of the Meeting to be adjourned. The persons named as proxies will vote in favor of adjournment those proxies that they are entitled to vote in favor of a proposal. They will vote against adjournment those proxies required to be voted against a proposal. Your fund pays the costs of any additional solicitation and of any adjourned session. Any proposal for which sufficient favorable votes have been received may be acted upon and considered final regardless of whether the Meeting is adjourned to permit additional solicitation with respect to any other proposal.

Duplicate mailings. As permitted by SEC rules, Putnam Management's policy is to send a single copy of the proxy statement to shareholders who share the same last name and address, unless a shareholder previously has requested otherwise. Separate proxy cards will be included with the proxy statement for each account registered at that address. If you would prefer to receive your own copy of the proxy statement, please contact Putnam Investor Services by phone at 1-800-225-1581 or by mail at P.O. Box 8383, Boston, MA 02266-8383.

Financial information. Your fund's Clerk will furnish to you, upon request and without charge, a copy of the fund's annual report for its most recent fiscal year, and a copy of its semiannual report for any subsequent semiannual period. You may direct these requests to Putnam Investor Services, Inc. P.O. Box 8383, Boston, MA 02266-8383 or by phone at 1-800-225-1581. You may also access copies of these reports by visiting Putnam's Web site at <http://www.putnam.com/individual>.

Fund Information

Putnam Investments. Putnam Management, your fund's investment manager and administrator, is owned through a series of holding companies by Putnam Investments, LLC ("Putnam Investments"). Putnam Investments is a holding company that, except for a minority stake owned by employees, is owned (through a series of holding companies) by Great-West Lifeco Inc., which is a financial services holding company with interests in the life insurance, retirement, savings, and reinsurance businesses. Its businesses have operations in Canada, the United States and Europe. Great-West Lifeco Inc. is a majority-owned subsidiary of Power Financial Corporation. Power Financial Corporation is a diversified management and holding company that has interests, directly or indirectly, in companies that are active in the financial services sector in Canada, the United States and Europe. It also has substantial holdings in a group of energy, water, waste services, specialty minerals and cement and building materials companies in Europe. Power Corporation of Canada, a diversified international management and holding company, owns a majority of the voting securities of Power Financial Corporation. The Hon. Paul Desmarais, Sr., through a group of holding companies that he controls, has voting control of Power Corporation of Canada.

The address of each of Putnam Investments and Putnam Management is One Post Office Square, Boston, Massachusetts 02109. The address of Great-West Lifeco Inc. is 100 Osborne Street North, Winnipeg, Manitoba R3C 3A5. The address of Mr. Desmarais, Power Corporation of Canada and Power Financial Corporation is 751 Victoria Square, Montreal, Quebec H2Y 2J3, Canada. Robert L. Reynolds is the President and Chief Executive Officer of Putnam Investments. His address is One Post Office Square, Boston, MA 02109.

29

Limitation of Trustee liability. Your fund's Agreement and Declaration of Trust 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 is determined in the manner specified in the Agreement and Declaration of Trust that they have not acted in good faith in the reasonable belief that their actions were in the best interests of the fund or that such indemnification would relieve any officer or Trustee of any liability to the fund or its shareholders arising by reason of willful misfeasance, bad faith, gross negligence or reckless disregard of his or her duties. Your fund, at its expense, provides liability insurance for the benefit of its Trustees and officers.

Independent Registered Public Accounting Firm. As set forth in the table below, the Audit and Compliance Committee and the full Board of Trustees have selected KPMG LLP, Two Financial Center, 60 South Street, Boston, Massachusetts 02110, to serve as the independent registered public accounting firm for your fund's current fiscal year. Representatives of KPMG LLP are expected to be present at the Meeting to make statements and to respond to appropriate questions.

The following table presents fees billed in each of the last two fiscal years for services rendered to the fund by its independent registered public accounting firm:

Fiscal Year Ended	Audit Fees	Audit-Related Fees	Tax Fees	All Other Fees
October 31, 2010	\$52,880	\$24,700	\$5,800	\$—
October 31, 2009	\$53,119	\$26,409	\$5,800	\$—

25

Audit Fees represents fees billed for the fund's last two fiscal years relating to the audit and review of the financial statements included in annual reports and registration statements, and other services that are normally provided in connection with statutory and regulatory filings or engagements.

Audit-Related Fees represents fees billed in the fund's last two fiscal years for services traditionally performed by the fund's auditor, including accounting consultation for proposed transactions or concerning financial accounting and reporting standards and other audit or attest services not required by statute or regulation.

Tax Fees represent fees for tax compliance, tax planning and tax advice services. Tax planning and tax advice services include assistance with tax audits, employee benefit plans and requests for rulings or technical advice from taxing authorities.

The following table presents the amounts KPMG LLP billed for aggregate non-audit fees in each of the last two fiscal years to the fund, Putnam Management and any entity controlling, controlled by or under common control with Putnam Management that provides ongoing services to the fund:

30

Fiscal year ended

October 31, 2010	\$30,500
October 31, 2009	\$32,209

Pre-Approval Policies of the Audit and Compliance Committee. The Audit and Compliance Committee has determined that, as a matter of policy, all work performed for the fund by the fund's independent auditor will be pre-approved by the Committee itself and thus will generally not be subject to pre-approval procedures.

The Audit and Compliance Committee also has adopted a policy to pre-approve the engagement by Putnam Management and certain of its affiliates of the fund's independent auditor, even in circumstances where pre-approval is not required by applicable law. Any such requests by Putnam Management or certain of its affiliates are typically submitted in writing to the Committee and explain, among other things, the nature of the proposed engagement, the estimated fees, and why this work should be performed by that particular audit firm as opposed to another one. In reviewing such requests, the Committee considers, among other things, whether the provision of such services by the audit firm is compatible with the independence of the audit firm.

Since the beginning of the two most recently completed fiscal years of the fund, all work performed by the independent auditor for the fund, Putnam Management and any entity controlling, controlled by or under common control with Putnam Management that provides ongoing services to the fund was pre-approved by the Committee or a member of the Committee pursuant to the pre-approval policies discussed above.

No tax fees for the fiscal years ended 2010 and 2009, respectively, were billed by your fund's independent auditor for services required to be approved pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X.

The Audit and Compliance Committee of your fund has submitted the following report:

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

The Audit and Compliance Committee has reviewed and discussed with management of your fund the audited financial statements for the last fiscal year. The Audit and Compliance Committee has discussed with your fund's independent auditor the matters required to be discussed by Statements on Auditing Standard No. 61 (SAS 61). SAS 61 requires independent auditors to communicate to the Audit and Compliance Committee matters including, if applicable: (1) methods used to account for significant unusual transactions; (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus; (3) the process used by management in formulating particularly sensitive accounting estimates and the basis for the auditor's conclusions regarding the reasonableness of those estimates and (4) disagreements with management over the application of accounting principles and certain other

31

matters. The Audit and Compliance Committee has received the written disclosures and the letter from your fund's independent auditor required by the SEC's Independence Standards Board Standard No. 1 (among other things, requiring auditors to make written disclosures to and discuss with the Audit and Compliance Committee various matters relating to the auditor's independence), and has discussed with such accountants the independence of such accountants. Based on the foregoing review and discussions, the Audit and Compliance Committee recommended to the Trustees that the audited financial statements for the last fiscal year be included in your fund's annual report to shareholders for the last fiscal year.

Robert E. Patterson (Chairman)
 Barbara M. Baumann
 Robert J. Darretta
 John A. Hill
 Kenneth R. Leibler

Officers and other information. All of the officers of your fund are employees of Putnam Management or its affiliates or serve on the staff of the Office of the Trustees. Because of his positions with Putnam Management or its affiliates, Mr. Reynolds, as well as the other affiliated officers of your fund, will benefit indirectly from the management fees and investor servicing fees paid or allowed by your fund. In addition to Mr. Reynolds, the other officers of your fund are as follows:

Name, Address¹, Year of Birth, Held with fund	Length of Service with the Putnam Funds²	Principal Occupation(s) During Past 5 Years and Position(s) with Fund's Investment Adviser and Distributor³
Jonathan S. Horwitz⁴ (Born 1955) <i>Executive Vice President, Treasurer, Principal Executive Officer and Compliance Liaison</i>	Since 2004	Executive Vice President, Treasurer, Principal Executive Officer and Compliance Liaison, The Putnam Funds.
Steven D. Krichmar (Born 1958) <i>Vice President and Principal Financial Officer</i>	Since 2002	Chief of Operations, Putnam Investments and Putnam Management.
Janet C. Smith (Born 1965)	Since 2007	Director of Fund Administration

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

*Vice President, Assistant Treasurer
and Principal Accounting Officer* Services, Putnam Investments and
Putnam Management.

Beth Mazor (Born 1958) Since 2002
Vice President Manager of Trustee Relations,
Putnam Investments and Putnam
Management.

Robert R. Leveille (Born 1969) Since 2007
*Vice President and
Chief Compliance Officer* Chief Compliance Officer, Putnam
Investments, Putnam Management
and Putnam Retail Management.

Mark C. Trenchard (Born 1962) Since 2002
*Vice President and
BSA Compliance Officer* Director of Operational Compliance,
Putnam Investments and Putnam
Retail Management.

Robert T. Burns (Born 1961) Since 2011
Vice President and Chief Legal Officer General Counsel, Putnam Investments
and Putnam Management.

32

Name, Address¹, Year of Birth, Held with fund	Length of Service with the Putnam Funds²	Principal Occupation(s) During Past 5 Years and Position(s) with Fund's Investment Adviser and Distributor³
James P. Pappas (Born 1953) <i>Vice President</i>	Since 2004	Director of Trustee Relations, Putnam Investments and Putnam Management.
Judith Cohen⁴ (Born 1945) <i>Vice President, Clerk and Assistant Treasurer</i>	Since 1993	Vice President, Clerk and Assistant Treasurer, The Putnam Funds.
Michael Higgins⁴ (Born 1976) <i>Vice President, Senior Associate Treasurer and Assistant Clerk</i>	Since 2010	Manager of Finance, Dunkin' Brands (2008–2010); Senior Financial Analyst, Old Mutual Asset Management (2007–2008); Senior Financial Analyst, Putnam Investments (1999–2007).

Nancy E. Florek⁴ (Born 1957) <i>Vice President, Assistant Clerk, Assistant Treasurer and Proxy Manager</i>	Since 2000	Vice President, Assistant Clerk, Assistant Treasurer and Proxy Manager, The Putnam Funds.
---	------------	---

Susan G. Malloy (Born 1957) <i>Vice President and Assistant Treasurer</i>	Since 2007	Director of Accounting and Control Services, Putnam Management.
---	------------	--

¹ The address of each Officer is One Post Office Square, Boston, MA 02019.

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 who are members of the Trustees' independent administrative staff. Compensation for these individuals is fixed by the Trustees and reimbursed to Putnam Management.

Net assets of your fund as of June 30, 2011*: \$414,120,822.08

* Excludes the amount of aggregate liquidation preference of outstanding preferred shares of your fund.

Shares of your fund outstanding as of June 20, 2011

Common shares	57,439,521.377
<hr/>	
Preferred shares	
Series A	245
Series C	1,980

5% beneficial ownership. As of June 30, 2011, to the knowledge of the fund, no person owned beneficially or of record 5% or more of any class of shares of the fund, except as follows:

Cede & Company*	
20 Bowling Green	53,285,378.000 common shares
New York, NY 10004-1408	(92.77% of outstanding common shares)

Bank of America Corporation**

Edgar Filing: PUTNAM MANAGED MUNICIPAL INCOME TRUST - Form DEF 14A

Bank of America, NA

Bank of America Corporate Center

100 South Tryon Street

Charlotte, NC 28255

1,607 preferred shares

(72.2% of outstanding preferred shares)

Blue Ridge Investments, L.L.C.**

214 North Tryon Street

Charlotte, NC 28255

* Believed to hold shares only as nominee.

** Bank of America Corporation and Blue Ridge Investments, L.L.C. reported shared beneficial ownership as of January 1, 2011 in a January 11, 2011 filing with the SEC on Schedule 13D.

34

The Putnam Funds

One Post Office Square

Boston, Massachusetts 02109

Toll-free 1-800-225-1581

269263 8/11

PUTNAM MANAGED MUNICIPAL INCOME TRUST

By signing below, you, as a holder of preferred shares of Putnam Managed Municipal Income Trust, appoint Trustees John A. Hill and Robert E. Patterson, and each of them separately, with power of substitution to each, to be your proxies. You are empowering them to vote your Putnam fund shares on your behalf at the meeting of the shareholders of Putnam Managed Municipal Income Trust. The meeting will take place on September 16, 2011 and may be adjourned to later times or dates.

Your vote is being solicited on behalf of the Trustees. When you complete and sign the proxy card, your shares will be voted on your behalf exactly as you have indicated on the other side of this card. **If you simply sign the proxy card, and do not vote on the specific proposal, your shares will be automatically voted as the Trustees recommend.** The proxies are also authorized to vote at their discretion on any other matter that arises at the meeting or any adjournment of the meeting.

Sign your name exactly as it appears on this card. If you own shares jointly, each owner should sign. When signing as executor, administrator, attorney, trustee, guardian, or as custodian for a minor, please give your full title as such. If you are signing for a corporation, please sign the full corporate name and indicate the signer's office. If you are a partner, sign in the partnership name.

Proposal **Please vote by filling in the appropriate box below.**

THE TRUSTEES RECOMMEND A VOTE **FOR ALL** NOMINEES.

1. Fixing the number of Trustees at 12 and electing your fund's 12 nominees for Trustees.

1) Ravi Akhoury	6) John A. Hill	11) Robert L. Reynolds	FOR ALL	WITHHOLD ALL	FOR ALL
2) Barbara M. Baumann	7) Paul L. Joskow	12) W. Thomas Stephens			EXCEPT*
3) Jameson A. Baxter	8) Kenneth R. Leibler				
4) Charles B. Curtis	9) George Putnam, III				
5) Robert J. Darretta	10) Robert E. Patterson				

*To withhold authority to vote for one or more specific nominees, but to vote for all other nominees, check the "FOR ALL EXCEPT" box and write the name(s) or number(s) of the excluded nominee(s) below:

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be held on Sep
The proxy statement for this meeting is available at www.proxyonline.com.

If you have any questions on this proposal, please call 1-800-225-1581.

Cusip: 123456789

Barcode

TAG ID: 12345678

PUTNAM MANAGED MUNICIPAL INCOME TRUST

By signing below, you, as a holder of common shares of Putnam Managed Municipal Income Trust, appoint Trustees John A. Hill and Robert E. Patterson, and each of them separately, with power of substitution to each, to be your proxies. You are empowering them to vote your Putnam fund shares on your behalf at the meeting of the shareholders of Putnam Managed Municipal Income Trust. The meeting will take place on September 16, 2011 and may be adjourned to later times or dates.

Your vote is being solicited on behalf of the Trustees. When you complete and sign the proxy card, your shares will be voted on your behalf exactly as you have indicated on the other side of this card. **If you simply sign the proxy card, and do not vote on the specific proposal, your shares will be automatically voted as the Trustees recommend.** The proxies are also authorized to vote at their discretion on any other matter that arises at the meeting or any adjournment of the meeting.

Sign your name exactly as it appears on this card. If you own shares jointly, each owner should sign. When signing as executor, administrator, attorney, trustee, guardian, or as custodian for a minor, please give your full title as such. If you are signing for a corporation, please sign the full corporate name and indicate the signer's office. If you are a partner, sign in the partnership name.

Proposal

Please vote by filling in the appropriate box below.

THE TRUSTEES RECOMMEND A VOTE **FOR ALL**
NOMINEES.

1. Fixing the number of Trustees at 12 and electing your fund's 10 nominees for Trustees
voted on by the common and preferred shareholders voting as a single class:

1) Ravi Akhoury	6) Paul L. Joskow	FOR ALL	WITHHOLD ALL	FOR ALL
2) Barbara M. Baumann	7) Kenneth R. Leibler			EXCEPT*
3) Jameson A. Baxter	8) George Putnam, III			
4) Charles B. Curtis	9) Robert L. Reynolds			
5) Robert J. Darretta	10) W. Thomas Stephens			

*To withhold authority to vote for one or more specific nominees, but to vote for all other nominees, check the "FOR ALL EXCEPT" box and write the name(s) or number(s) of the excluded nominee(s) below:

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be held on Sep
The proxy statement for this meeting is available at www.proxyonline.com.

If you have any questions on this proposal, please call 1-800-225-1581.

Cusip: 123456789

Barcode

TAG ID: 12345678
