

Putnam Municipal Opportunities Trust

The fund's portfolio 7/31/12 (Unaudited)

Key to holding's abbreviations

AGM — Assured Guaranty Municipal Corporation

AGO — Assured Guaranty, Ltd.

AMBAC — AMBAC Indemnity Corporation

COP — Certificates of Participation

FGIC — Financial Guaranty Insurance Company

FNMA Coll. — Federal National Mortgage Association Collateralized

FRB — Floating Rate Bonds: the rate shown is the current interest rate at the close of the reporting period

G.O. Bonds — General Obligation Bonds

NATL — National Public Finance Guarantee Corp.

SGL — Syncora Guarantee, Inc.

U.S. Govt. Coll. — U.S. Government Collateralized

VRDN — Variable Rate Demand Notes, which are floating-rate securities with long-term maturities, that carry coupons that reset every one or seven days. The rate shown is the current interest rate at the close of the reporting period.

MUNICIPAL BONDS AND NOTES (138.1%)(a)

Rating^(RAT)

Principal
amount

Value

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from May 1, 2012 through July 31, 2012 (the reporting period). Within the following notes to the portfolio, references to "ASC 820" represent Accounting Standards Codification ASC 820 *Fair Value Measurements and Disclosures* and references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC.

^(a) Percentages indicated are based on net assets of \$573,398,777.

(RAT) The Moody's, Standard & Poor's or Fitch ratings indicated are believed to be the most recent ratings available at the close of the reporting period for the securities listed. Ratings are generally ascribed to securities at the time of issuance. While the agencies may from time to time revise such ratings, they undertake no obligation to do so, and the ratings do not necessarily represent what the agencies would ascribe to these securities at the close of the reporting period. Securities rated by Putnam are indicated by "/P." Securities rated by Fitch are indicated by "/F." The rating of an insured security represents what is believed to be the most recent rating of the insurer's claims-paying ability available at the close of the reporting period, if higher than the rating of the direct issuer of the bond, and does not reflect any subsequent changes. Security ratings are defined in the Statement of Additional Information.

(b) The aggregate identified cost on a tax basis is \$717,897,884, resulting in gross unrealized appreciation and depreciation of \$80,941,246 and \$6,957,612, respectively, or net unrealized appreciation of \$73,983,634.

(NON) Non-income-producing security.

(STP) The interest rate and date shown parenthetically represent the new interest rate to be paid and the date the fund will begin accruing interest at this rate.

(FWC) Forward commitment, in part or in entirety.

(T) Underlying security in a tender option bond transaction. The security has been segregated as collateral for financing transactions.

At the close of the reporting period, the fund maintained liquid assets totaling \$51,429,948 to cover certain derivatives contracts.

144A after the name of an issuer represents securities exempt from registration under Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

The rates shown on Mandatory Put Bonds are the current interest rates at the close of the reporting period.

The dates shown parenthetically on Mandatory Put Bonds represent the next mandatory put dates.

The dates shown parenthetically on prerefunded bonds represent the next prerefunding dates.

The dates shown on debt obligations are the original maturity dates.

The fund had the following sector concentrations greater than 10% at the close of the reporting period (as a percentage of net assets):

Health care	25.4%
Utilities	24.2
Transportation	16.5
State Government	13.9
Local Government	12.2

Education

11.4

Security valuation: Tax-exempt bonds and notes are generally valued on the basis of valuations provided by an independent pricing service approved by the Trustees. Such services use information with respect to transactions in bonds, quotations from bond dealers, market transactions in comparable securities and various relationships between securities in determining value. These securities will generally be categorized as Level 2.

Certain investments, including certain restricted and illiquid securities and derivatives are also valued at fair value following procedures approved by the Trustees. Such valuations and procedures are reviewed periodically by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures and recovery rates. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs. 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 in a current sale and does not reflect an actual market price, which may be different by a material amount.

Tender option bond transactions: The fund may participate in transactions whereby a fixed-rate bond is transferred to a tender option bond trust (TOB trust) sponsored by a broker. The TOB trust funds the purchase of the fixed rate bonds by issuing floating-rate bonds issued to third parties and allowing the fund to retain the residual interest in the TOB trust's assets and cash flows, which are in the form of inverse floating rate bonds. The inverse floating rate bonds held by the fund give the fund the right to (1) cause the holders of the floating rate bonds to tender their notes at par, and (2) to have the fixed-rate bond held by the TOB trust transferred to the fund, causing the TOB trust to collapse. The fund accounts for the transfer of the fixed-rate bond to the TOB trust as a secured borrowing by including the fixed-rate bond in The fund's portfolio and including the floating rate bond as a liability in the Statement of assets and liabilities. At the close of the reporting period, the fund's investments with a value of \$92,772,411 were held by the TOB trust and served as collateral for \$41,342,462 in floating-rate bonds outstanding. During the reporting period, the fund incurred interest expense of \$19,266 for these investments based on an average interest rate of 0.18%.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

	Valuation inputs		
	Level 1	Level 2	Level 3
Investments in securities:			
Municipal bonds and notes	\$—	\$791,881,518	\$—
Totals by level	\$—	\$791,881,518	\$—

Item 2. Controls and Procedures:

(a) The registrant's principal executive officer and principal financial officer have concluded, based on their evaluation of the effectiveness of the design and operation of the registrant's disclosure controls and procedures as of a date within 90 days of the filing date of this report, that the design and operation of such procedures are generally effective to provide reasonable assurance that information required to be disclosed by the registrant in this report is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms.

(b) Changes in internal control over financial reporting: Not applicable

Item 3. Exhibits:

Separate certifications for the principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Investment Company Act of 1940, as amended, are filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Putnam Municipal Opportunities Trust

By (Signature and Title):

/s/ Janet C. Smith

Janet C. Smith

Principal Accounting Officer

Date: September 28, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title):

/s/ Jonathan S. Horwitz

Jonathan S. Horwitz

Principal Executive Officer

Date: September 28, 2012

By (Signature and Title):

/s/ Steven D. Krichmar

Steven D. Krichmar

Principal Financial Officer

Date: September 28, 2012