

NUVEEN MASSACHUSETTS PREMIUM INCOME MUNICIPAL FUND

Form 8-A12B

January 13, 2010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES

PURSUANT TO SECTION 12(b) OR (g) OF THE

SECURITIES EXCHANGE ACT OF 1934

Nuveen Massachusetts Premium Income Municipal Fund

(Exact Name of Registrant as Specified in Its Charter)

MASSACHUSETTS
(State of Incorporation

or Organization)

36-7032570
(I.R.S. Employer

Identification No.)

333 West Wacker Drive

Chicago, Illinois 60606

(Address of Principal Executive Offices)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of Each Class to be so Registered	Name of Each Exchange On Which Each Class is to be Registered
MuniFund Term Preferred Shares of Beneficial Interest, \$10.00 liquidation preference per share	New York Stock Exchange

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box.

Securities Act registration statement file number to which this form relates: 333-163256

Securities to be registered pursuant to Section 12(g) of the Act:

NONE

(Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

The shares (the "Shares") to be registered hereunder are MuniFund Term Preferred Shares, \$10.00 liquidation value per share, of Nuveen Massachusetts Premium Income Municipal Fund (the "Registrant"). A description of the Shares is contained under the heading "Description of Shares" in the prospectus to be included in an amendment to the Registrant's registration statement on Form N-2, which registration statement was filed under the Securities Act of 1933, as amended, and the Investment Company Act of 1940, as amended, on January 14, 2010 (Registration Nos. 333-163256 and 811-07484, respectively), and such description is incorporated herein by reference. The description of the Shares contained in the definitive prospectus to be filed pursuant to Rule 497, which will contain the final terms of the Shares, is deemed to be incorporated herein by reference and made part of this registration statement.

Item 2. Exhibits.

1. Form of Share Certificate
2. Rating Agency Guidelines
3. Form of Statement Establishing and Fixing the Rights and Preferences of Registrant's MuniFund Term Preferred Shares

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Date: January 13, 2010

NUVEEN MASSACHUSETTS PREMIUM INCOME
MUNICIPAL FUND

By /s/ Gifford R. Zimmerman
Name: **Gifford R. Zimmerman**
Title: **Chief Administrative Officer**