

**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 12(g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**Fifth Street Finance Corp.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(Jurisdiction of Incorporation  
or Organization)

**12-1219283**  
(IRS Employer  
Identification No.)

**10 Bank Street, 12th Floor, White Plains, NY**  
(Address of principal executive offices)

**10606**  
(Zip Code)

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

Title of each class to be so registered  
**5.875% Senior Notes due 2024**

Name of each exchange on which each class is to be registered  
**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), 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), check the following box. ☐

Securities Act registration statement file number to which this form relates: **333-180267**

Securities to be registered pursuant to Section 12(g) of the Act: **None**

INFORMATION REQUIRED IN REGISTRATION STATEMENT

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

The description of the 5.875% Senior Notes due 2024 contained in the sections entitled “Specific Terms of the Notes and the Offering” in the Prospectus Supplement, dated October 11, 2012, and “Description of our Debt Securities” in the Prospectus contained therein, dated July 27, 2012, that was filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, on October 12, 2012, is incorporated by reference herein.

Item 2. Exhibits.

Pursuant to the Instructions as to exhibits for registration statements on Form 8-A, the documents listed below are filed as exhibits to this Registration Statement:

<u>Number</u>	<u>Exhibit</u>
4.1	Indenture, dated April 30, 2012, between Fifth Street Finance Corp. and Deutsche Bank Trust Company Americas, as trustee (Incorporated by reference to Exhibit (d)(4) filed with Fifth Street Finance Corp.’s Registration Statement on Form N-2 (File No. 333-180267), filed on July 27, 2012).
4.2	Form of First Supplemental Indenture relating to the 5.875% Senior Notes due 2024, between Fifth Street Finance Corp. and Deutsche Bank Trust Company Americas, as trustee (Incorporated by reference to Exhibit (d)(5) to Fifth Street Finance Corp.’s Post-Effective Amendment No. 2 to its Registration Statement on Form N-2 (File No. 333-180267), filed on October 18, 2012).
4.3	Form of 5.875% Senior Notes due 2024 (Incorporated by reference to Exhibit (d)(6) to Fifth Street Finance Corp.’s Post-Effective Amendment No. 2 to its Registration Statement on Form N-2 (File No. 333-180267), filed on October 18, 2012).

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## SIGNATURES

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

Date: October 26, 2012

**Fifth Street Finance Corp.**

By: /s/ Alexander C. Frank

Alexander C. Frank  
Chief Financial Officer

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## EXHIBIT INDEX

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