UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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

(State of incorporation or organization)

26-1219283 (I.R.S. Employer Identification No.)

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

10606 (Zip Code)

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. \Box

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

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

Title of each class to be so registered 6.125% Senior Notes due 2028

Name of each exchange on which each class is to be registered
The NASDAQ Stock Market LLC

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

None (Title of class)

INFORMATION REQUIRED IN REGISTRATION STATEMENT

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

The description of the 6.125% Senior Notes due 2028 (the "Notes") contained in the sections entitled "Specific Terms of the Notes and the Offering" in the prospectus supplement, dated March 27, 2013, 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 March 28, 2013, is incorporated herein by reference. The Notes are expected to be listed on the NASDAQ Global Select Market and to trade thereon within 30 days of the original issue date under the trading symbol "FSCFL."

Item 2.

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:

Number	<u>Exhibit</u>
1	Indenture, dated April 30, 2012, between the registrant and Deutsche Bank Trust Company Americas, as trustee (incorporated herein by reference to Exhibit (d)(4) filed with the registrant's registration statement on Form N-2 (File No. 333-180267) filed on July 27, 2012).
2	Form of Second Supplemental Indenture relating to the 6.125% Senior Notes due 2028, between the registrant and Deutsche Bank Trust Company Americas, as trustee (incorporated herein by reference to Exhibit (d)(7) filed with post-effective amendment no. 5 to the registrant's registration statement on Form N-2 (File No. 333-180267) filed on April 2, 2013).
3	Form of 6.125% Senior Notes due 2028 (incorporated herein by reference to Exhibit (d)(8) filed with post-effective amendment No. 5 to the registrant's registration statement on Form N-2 (File No. 333-180267) filed on April 2, 2013).

SIGNATURE

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, thereto duly authorized.

Date: April 2, 2013

Fifth Street Finance Corp.

By: /s/ Bernard D. Berman

Name: Bernard D. Berman

Title: President, Chief Compliance Officer and Secretary

EXHIBIT INDEX

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