UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-2

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

o Pre-Effective Amendment No.

x Post-Effective Amendment No. 4

Fifth Street Finance Corp.

(Exact name of registrant as specified in charter)

777 West Putnam Avenue, 3rd Floor Greenwich, CT 06830 (203) 681-3600

(Address and telephone number, including area code, of principal executive offices)

Leonard M. Tannenbaum Fifth Street Finance Corp. 777 West Putnam Avenue, 3rd Floor Greenwich, CT 06830

(Name and address of agent for service)

Copies to:

Steven B. Boehm, Esq. Harry S. Pangas, Esq. Sutherland Asbill & Brennan LLP 700 Sixth St., NW, Suite 700 Washington, DC 20001-3980 Tel: (202) 383-0100 Fax: (202) 637-3593

Approximate date of proposed public offering: From time to time after the effective date of this Registration Statement.

If any securities being registered on this form will be offered on a delayed or continuous basis in reliance on Rule 415 under the Securities Act of 1933, other than securities offered in connection with a dividend reinvestment plan, check the following box. x

EXPLANATORY NOTE

This Post-Effective Amendment No. 4 to the Registration Statement on Form N-2 (File No. 333-192770) is being filed pursuant to Rule 462(d) under the Securities Act of 1933, as amended (the "Securities Act"), solely for the purpose of adding exhibits to such Registration Statement. Accordingly, this Post-Effective Amendment No. 4 consists only of a facing page, this explanatory note, and Part C of the Registration Statement on Form N-2. This Post-Effective Amendment No. 4 does not change the form of prospectus relating to the Registration Statement on Form N-2 previously filed with the SEC. As permitted by Rule 462(d), this Post-Effective Amendment No. 4 shall become effective upon filing with the SEC.

PART C Other Information

Item 25. Financial Statements And Exhibits

(1) Financial Statements

The following financial statements of Fifth Street Finance Corp. (the "Registrant" or the "Company") are included in Part A of this Registration Statement:

UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

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(2) Exhibits

- (a)(1) Restated Certificate of Incorporation of the Registrant (Incorporated by reference to Exhibit 3.1 filed with the Registrant's Form 8-A (File No. 001-33901) filed on January 2, 2008).
- (a)(2) Certificate of Amendment to the Registrant's Restated Certificate of Incorporation (Incorporated by reference to Exhibit (a)(2) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-146743) filed on June 6, 2008).
- (a)(3) Certificate of Correction to the Certificate of Amendment to the Registrant's Restated Certificate of Incorporation (Incorporated by reference to Exhibit (a)(3) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-146743) filed on June 6, 2008).
- (a)(4) Certificate of Amendment to Registrant's Restated Certificate of Incorporation (Incorporated by reference to Exhibit 3.1 filed with the Registrant's Quarterly Report on Form 10-Q (File No. 001-33901) filed on May 5, 2010).
- (a)(5) Certificate of Amendment to Registrant's Certificate of Incorporation (Incorporated by reference to Exhibit (a)(5) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-180267) filed on April 2, 2013).
- (b) Second Amended and Restated Bylaws of the Registrant (Incorporated by reference to Exhibit 3.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on April 19, 2013).
- (d)(1) Form of Common Stock Certificate (Incorporated by reference to Exhibit 4.1 filed with the Registrant's Form 8-A (File No. 001-33901) filed on January 2, 2008).
- (d)(2) Indenture, dated April 12, 2011, between Registrant and Deutsche Bank Trust Company Americas, as trustee (including Form of 5.375% Convertible Notes due 2016) (Incorporated by reference to Exhibit 4.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on April 12, 2011).
- (d)(3) Indenture, dated April 30, 2012, between Registrant and Deutsche Bank Trust Company Americas, as trustee (Incorporated 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).
- (d)(4) Form of First Supplemental Indenture relating to the 5.875% Unsecured Notes due 2024, between the Registrant and Deutsche Bank Trust Company Americas, as trustee (including Form of 5.875% Unsecured Notes due 2024) (Incorporated by reference to Exhibit (d)(5) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-180267) filed on October 18, 2012).
- (d)(5) Form of Second Supplemental Indenture relating to the 6.125% Notes due 2028, between the Registrant and Deutsche Bank Trust Company Americas, as trustee (including Form of 6.125% Notes due 2028) (Incorporated by reference to Exhibit (d)(7) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-180267) filed on April 2, 2013).
- (d)(6) Form of Third Supplemental Indenture relating to the 4.875% Notes due 2019, between the Registrant and Deutsche Bank Trust Company Americas, as trustee (including Form of 4.875% Notes due 2019).*
- (d)(7) Statement of Eligibility of Trustee on Form T-1 (Incorporated by reference to Exhibit (d)(6) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on February 10, 2014).
- (d)(8) Form of Warrant Agreement and Warrant Certificate.**
- (e) Amended and Restated Dividend Reinvestment Plan (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on October 28, 2010)
- (f) Second Amended and Restated Investment Advisory Agreement by and between Registrant and Fifth Street Management LLC (Incorporated by reference to Exhibit 10.5 filed with the Registrant's Quarterly Report on Form 10-Q (File No. 001-33901) filed on May 4, 2011).
- (h)(1) Form of Underwriting Agreement for equity securities.**

- (h)(2) At-the-Market Equity Offering Sales Agreement, dated August 22, 2014, by and between Registrant and KeyBanc Capital Markets Inc. (Incorporated by reference to Exhibit (h)(2) filed with the Registrant's Post-Effective Amendment No. 3 to the Registration Statement on Form N-2 (File No. 333-192770) filed on August 25, 2014).
- (h)(3) Amendment No. 1 to At-the-Market Equity Offering Sales Agreement, dated September 5, 2014, by and between Registrant and KeyBanc Capital Markets Inc.*
- (j) Custody Agreement (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 10-Q (File No. 001-33901) filed on January 31, 2011).
- (k)(1) Administration Agreement by and between Registrant and FSC CT, Inc. (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 10-Q (File No. 814-00755) filed on February 6, 2014).
- (k)(2) Form of License Agreement by and between Registrant and Fifth Street Capital LLC (Incorporated by reference to Exhibit (k)(2) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-146743) filed on May 8, 2008).
- (k)(3) Purchase and Sale Agreement by and between Registrant and Fifth Street Funding, LLC, dated as of November 16, 2009 (Incorporated by reference to Exhibit 10.7 filed with the Registrant's Annual Report on Form 10-K (File No. 001-33901) filed on December 9, 2009).
- (k)(4) Amendment No. 1 to the Purchase and Sale Agreement by and between Registrant and Fifth Street Funding, LLC, dated as of November 30, 2011 (Incorporated by reference to Exhibit 10.2 filed with the Registrant's Form 8-K (File No. 001-33901) filed on December 5, 2011).
- (k)(5) Guarantee, Pledge and Security Agreement among Registrant, FSFC Holdings, Inc. and ING Capital LLC, dated as of May 27, 2010 (Incorporated by reference to Exhibit (k)(8) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-166012) filed on June 4, 2010).
- (k)(6) Amended and Restated Senior Secured Revolving Credit Agreement among Registrant, ING Capital LLC, Royal Bank of Canada, UBS Loan Finance, LLC, Morgan Stanley Bank, N.A., Key Equipment Finance Inc., Deutsche Bank Trust Company Americas and Patriot National Bank, dated as of February 22, 2011 (Incorporated by reference to Exhibit (k)(8) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-166012) filed on March 30, 2011).
- (k)(7) Amendment and Reaffirmation Agreement among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC and ING Capital LLC, dated as of February 22, 2011 (Incorporated by reference to Exhibit (k)(10) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-166012) filed on March 30, 2011).
- (k)(8) Amendment No. 1 to Amended and Restated Senior Secured Revolving Credit Agreement and Amendment No. 2 to the Guarantee, Pledge and Security Agreement, among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, Royal Bank of Canada, UBS Loan Finance LLC, Morgan Stanley Bank, N.A., Key Equipment Finance, Inc., Deutsche Bank Trust Company Americas and Patriot National Bank, dated as of July 8, 2011 (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on July 14, 2011).
- (k)(9) Amendment No. 2 to Amended and Restated Senior Secured Revolving Credit Agreement among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, Key Equipment Finance, Inc. and UBS Loan Finance LLC, dated as of November 29, 2011 (Incorporated by reference to Exhibit 10.15 filed with the Registrant's Annual Report on Form 10-K (File No. 814-00755) filed on November 29, 2011).
- (k)(10) Amendment No. 3 to Amended and Restated Senior Secured Revolving Credit Agreement among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, and the lenders party thereto, dated as of February 29, 2012 (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on March 2, 2012).

- (k)(11) Amendment No. 4 to Amended and Restated Senior Secured Revolving Credit Agreement among the Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, and the lenders party thereto, dated as of November 30, 2012 (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on December 4, 2012).
- (k)(12) Amendment No. 5 to Amended and Restated Senior Secured Revolving Credit Agreement among the Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, and the lenders party thereto, dated as of August 6, 2013 (Incorporated by reference to Exhibit 10.2 filed with the Registrant's Form 10-Q (File No. 814-00755) filed on August 7, 2013).
- (k)(13) Amendment No. 6 to Amended and Restated Senior Secured Revolving Credit Agreement among the Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, and the lenders party thereto, dated as of September 13, 2013 (Incorporated by reference to Exhibit (k)(20) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-186101) filed on September 26, 2013).
- (k)(14) Form of Incremental Assumption Agreement among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC and Increasing/Assuming Lender (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on October 24, 2013).
- (k)(15) Waiver Letter among Registrant, FSFC Holdings, Inc., Fifth Street Fund of Funds LLC, ING Capital LLC, Royal Bank of Canada and Key Equipment Finance, Inc., dated as of August 3, 2011 (Incorporated by reference to Exhibit 10.17 filed with the Registrant's Annual Report on Form 10-K (File No. 814-00755) filed on November 29, 2011).
- (k)(16) Loan and Servicing Agreement among Registrant, Fifth Street Funding II, LLC and Sumitomo Mitsui Banking Corporation, dated as of September 16, 2011 (Incorporated by reference to Exhibit 10.18 filed with the Registrant's Annual Report on Form 10-K (File No. 814-00755) filed on November 29, 2011).
- (k)(17) Amendment No. 1 and Waiver to the Loan and Servicing Agreement among Registrant, Fifth Street Funding II, LLC and Sumitomo Mitsui Banking Corporation, dated as of March 16, 2012 (Incorporated by reference to Exhibit 10.2 filed with the Registrant's Form 10-Q (File No. 814-00755) filed on May 8, 2012).
- (k)(18) Amendment No. 2 to the Loan and Servicing Agreement among Registrant, Fifth Street Funding II, LLC and Sumitomo Mitsui Banking Corporation, dated as of October 30, 2013 (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on November 5, 2013).
- (k)(19) Purchase and Sale Agreement by and between Registrant and Fifth Street Funding II, LLC, dated as of September 16, 2011 (Incorporated by reference to Exhibit 10.19 filed with the Registrant's Annual Report on Form 10-K (File No. 814-00755) filed on November 29, 2011).
- (k)(20) Senior Loan Fund JVI, LLC Limited Liability Company Agreement, dated May 2, 2014, by and between Fifth Street Finance Corp. and Trinity Universal Insurance Company (Incorporated by reference to Exhibit 10.1 filed with the Registrant's Form 8-K (File No. 001-33901) filed on May 7, 2014).
- (l) Opinion and Consent of Sutherland Asbill & Brennan LLP.
- (l)(2) Opinion and Consent of Sutherland Asbill & Brennan LLP.
- (n)(1) Consent of PricewaterhouseCoopers LLP (Incorporated by reference to Exhibit (n)(2) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on February 10, 2014).
- (n)(2) Report of PricewaterhouseCoopers LLP. (Incorporated by reference to Exhibit (n)(2) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on December 10, 2013).

- (r)(1) Joint Code of Ethics of the Registrant and Fifth Street Senior Floating Rate Corp. (Incorporated by reference to Exhibit (r)(1) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-186101) filed on September 26, 2013).
- (r)(2) Code of Ethics of Fifth Street Management LLC (Incorporated by reference to Exhibit (r)(2) filed with the Registrant's Registration Statement on Form N-2 (File No. 333-159720) filed on June 4, 2009).
- 99.1 Statement of Computation of Ratios of Earnings to Fixed Charges (Incorporated by reference to Exhibit 99.1 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on December 10, 2013).
- 99.2 Form of prospectus supplement for common stock offerings (Incorporated by reference to Exhibit 99.2 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-186101) filed on April 5, 2013).
- 99.3 Form of prospectus supplement for debt securities offerings (Incorporated by reference to Exhibit 99.3 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-186101) filed on April 5, 2013).
- 99.4 Form of prospectus supplement for warrant offerings (Incorporated by reference to Exhibit 99.4 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-186101) filed on April 5, 2013).
- 99.5 Form of prospectus supplement for retail note offerings (Incorporated by reference to Exhibit 99.1 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on February 10, 2014).
- 99.6 Form of prospectus supplement for institutional note offerings (Incorporated by reference to Exhibit 99.1 filed with the Registrant's Registration Statement on Form N-2 (File No. 333-192770) filed on February 10, 2014).
- * Filed herewith.

** To be filed by pre- or post-effective amendment, if applicable.

Item 26. Marketing Arrangements

The information contained under the heading "Plan of Distribution" on this Registration Statement is incorporated herein by reference and any information concerning any underwriters will be contained in the accompanying prospectus supplement, if any.

Item 27. Other Expenses Of Issuance And Distribution

| SEC registration fee | \$ | 193,200 |
|---|------|-----------|
| NASDAQ Global Select Market listing fee | \$ | 350,000 |
| FINRA filing fee | \$ | 225,500 |
| Accounting fees and expenses | \$ | 300,000 |
| Legal fees and expenses | \$ | 800,000 |
| Printing and engraving | \$ | 200,000 |
| Total | \$ 2 | 2,068,700 |

The amounts set forth above, except for the SEC and FINRA fees, are in each case estimated. All of the expenses set forth above shall be borne by the Registrant.

Item 28. Persons Controlled By Or Under Common Control

As of March 31, 2014, the following list sets forth each of the Registrant's subsidiaries, the state or country under whose laws the subsidiary is organized, and the percentage of voting securities or membership interests owned by the Registrant in such subsidiary:

- FSFC Holdings, Inc. a Delaware corporation (100%)
- Fifth Street Fund of Funds LLC a Delaware limited liability company (100%)

- Fifth Street Funding, LLC a Delaware limited liability company (100%)
- Fifth Street Funding II, LLC a Delaware limited liability company (100%)
- Fifth Street Mezzanine Partners IV, L.P. a Delaware limited partnership (100%)
- FSMP IV GP, LLC a Delaware limited liability company (100%)
- Fifth Street Mezzanine Partners V, L.P. a Delaware limited partnership (100%)
- FSMP V GP, LLC a Delaware limited liability company (100%)

Each of our subsidiaries is consolidated for financial reporting purposes.

In addition, as of March 31, 2014, the Registrant may be deemed to control Traffic Solutions Holdings, Inc., TransTrade Operators, Inc., HFG Holdings, LLC, First Star Aviation LLC, First Star Speir Aviation 1 Limited, First Star Bermuda Aviation Limited and Eagle Hospital Physicians, LLC.

Item 29. Number Of Holders Of Securities

The following table sets forth the number of record holders of the Registrant's capital stock at July 11, 2014.

| Title of Class | Number of Record Holders |
|--------------------------------|-----------------------------|
| Common stock, \$0.01 par value | 69 |

Item 30. Indemnification

Section 145 of the Delaware General Corporation Law empowers a Delaware corporation to indemnify its officers and directors and specific other persons to the extent and under the circumstances set forth therein.

Section 102(b)(7) of the Delaware General Corporation Law allows a Delaware corporation to eliminate the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liabilities arising (a) from any breach of the director's duty of loyalty to the corporation or its stockholders; (b) from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (c) under Section 174 of the Delaware General Corporation Law; or (d) from any transaction from which the director derived an improper personal benefit.

Subject to the Investment Company Act of 1940, as amended (the "1940 Act") or any valid rule, regulation or order of the SEC thereunder, our Restated Certificate of Incorporation provides that we will indemnify any person who was or is a party or is threatened to be made a party to any threatened action, suit or proceeding whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or officer of the Registrant, or is or was serving at the request of the Registrant as a director or officer of another corporation, partnership, limited liability company, joint venture, trust or other enterprise, in accordance with provisions corresponding to Section 145 of the Delaware General Corporation Law. The 1940 Act provides that a company may not indemnify any director or officer against liability to it or its security holders to which he or she might otherwise be subject by reason of his or her willful misfeasance, bad faith, gross negligence or reckless disregard of the duties involved in the conduct of his or her office unless a determination is made by final decision of a court, by vote of a majority of a quorum of directors who are disinterested, non-party directors or by independent legal counsel that the liability for which indemnification is sought did not arise out of the foregoing conduct. In addition, our Restated Certificate of Incorporation provides that the indemnification described therein is not exclusive and shall not exclude any other rights to which the person seeking to be indemnified may be entitled under statute, any bylaw, agreement, vote of stockholders or directors who are not interested persons, or otherwise, both as to action in his official capacity and to his action in another capacity while holding such office.

The above discussion of Section 145 of the Delaware General Corporation Law and the Registrant's Restated Certificate of Incorporation is not intended to be exhaustive and is respectively qualified in its entirety by such statute and the Registrant's Restated Certificate of Incorporation.

The Registrant has obtained primary and excess insurance policies insuring our directors and officers against some liabilities they may incur in their capacity as directors and officers. Under such policies, the insurer, on the Registrant's behalf, may also pay amounts for which the Registrant has granted indemnification to the directors or officers.

The Registrant may agree to indemnify any underwriters in connection with an offering pursuant to this Registration Statement against specific liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act").

Item 31. Business And Other Connections Of Investment Adviser

A description of any other business, profession, vocation, or employment of a substantial nature in which our investment adviser, and each executive officer of our investment adviser, is or has been during the past two fiscal years, engaged in for his or her own account or in the capacity of director, officer, employee, partner or trustee, is set forth in Part A of this Registration Statement in the sections entitled "Business — The Investment Adviser," "Management — Board of Directors and Executive Officers" and "Investment Advisory Agreement." Additional information regarding our investment adviser and its officers is set forth in its Form ADV, as filed with the Securities and Exchange Commission (SEC File No. 801-68676), and is incorporated herein by reference.

Item 32. Location Of Accounts And Records

All accounts, books and other documents required to be maintained by Section 31(a) of the Investment Company Act of 1940, and the rules thereunder are maintained at the offices of:

⁽¹⁾ the Registrant, Fifth Street Finance Corp., 777 West Putnam Avenue, 3rd Floor, Greenwich, CT 06830;

⁽²⁾ the Transfer Agent, American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, NY 11219;

⁽³⁾ the Custodian, U.S. Bank National Association, 214 N Tryon Street, 27th Floor, Charlotte, NC 28202;

⁽⁴⁾ the investment adviser, Fifth Street Management LLC, 777 West Putnam Avenue, 3rd Floor, Greenwich, CT 06830; and

⁽⁵⁾ the administrator, FSC CT, Inc., 777 West Putnam Avenue, 3rd Floor, Greenwich, CT 06830.

Item 33. Management Services

Not Applicable.

Item 34. Undertakings

1. We hereby undertake to suspend any offering of shares until the prospectus is amended if (1) subsequent to the effective date of this Registration Statement, our net asset value declines more than ten percent from our net asset value as of the effective date of this Registration Statement or (2) our net asset value increases to an amount greater than our net proceeds (if applicable) as stated in the prospectus.

2. We hereby undertake:

a. to file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(1) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(2) to reflect in the prospectus or prospectus supplement any facts or events after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; and

(3) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement.

b. for the purpose of determining any liability under the Securities Act, that each such post-effective amendment to this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of those securities at that time shall be deemed to be the initial bona fide offering thereof.

c. to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

d. for the purpose of determining liability under the Securities Act to any purchaser, that if we are subject to Rule 430C under the Securities Act, each prospectus filed pursuant to Rule 497(b), (c), (d) or (e) under the Securities Act as part of this Registration Statement relating to an offering shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness, provided, however, that no statement made in a registration statement or prospectus or prospectus supplement that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

e. for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of securities, regardless of the underwriting method used to sell such securities to the purchaser, that if the securities are offered or sold to such purchaser by means of any of the following communications, we will be a seller to the purchaser and will be considered to offer or sell such securities to the purchaser:

(1) any preliminary prospectus or prospectus or prospectus supplement of us relating to the offering required to be filed pursuant to Rule 497 under the Securities Act;

(2) the portion of any advertisement pursuant to Rule 482 under the Securities Act relating to the offering containing material information about us or our securities provided by or on behalf of us; and

(3) any other communication that is an offer in the offering made by us to the purchaser.

f. to file a post-effective amendment to the registration statement, and to suspend any offers or sales pursuant to the registration statement until such post-effective amendment has been declared effective under the 1933 Act, in the event our shares of common stock are trading below our net asset value per share and either (i) we receive, or have been advised by our independent registered accounting firm that we will receive, an audit report reflecting substantial doubt regarding our ability to continue as a going concern or (ii) we have concluded that a fundamental change has occurred in our financial position or results of operations.

g. Insofar as indemnification for liability arising under the Securities Act may be permitted to our directors, officers and controlling persons, that we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of us in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we undertake, unless in the opinion of our counsel the matter has been settled by controlling precedent, to submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and we will be governed by the final adjudication of such issue.

3. We hereby undertake that:

a. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and

contained in a form of prospectus filed by us pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

b. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

4. We hereby undertake to not seek to sell shares under a prospectus supplement to the registration statement, or a post-effective amendment to the registration statement, of which the prospectus forms a part (the "current registration statement") if the cumulative dilution to our net asset value ("NAV") per share arising from offerings from the effective date of the current registration statement through and including any follow-on offering would exceed 15% based on the anticipated pricing of such follow-on offering. This limit would be measured separately for each offering pursuant to the current registration statement by calculating the percentage dilution or accretion to aggregate NAV from that offering and then summing the anticipated percentage dilution from each subsequent offering. If we file a new post-effective amendment, the threshold would reset.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Post-Effective Amendment No. 4 to the Registration Statement on Form N-2 to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Greenwich, State of Connecticut, on September 8, 2014.

FIFTH STREET FINANCE CORP.

By:/s/ LEONARD M. TANNENBAUM

Name: Leonard M. Tannenbaum

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 4 to the Registration Statement on Form N-2 has been signed below by the following persons in the capacities and on the dates indicated:

| Signature | Title | Date |
|---------------------------|--|-------------------|
| /s/ LEONARD M. TANNENBAUM | Chief Executive Officer and Director | September 8, 2014 |
| Leonard M. Tannenbaum | (Principal Executive Officer) | |
| /s/ RICHARD A. PETROCELLI | Chief Financial Officer (Principal Financial | September 8, 2014 |
| Richard A. Petrocelli | and Accounting Officer) | |
| /s/ BERNARD D. BERMAN | President, Secretary and Director | September 8, 2014 |
| Bernard D. Berman | | |
| /s/ JAMES CASTRO-BLANCO | Director | September 8, 2014 |
| James Castro-Blanco | | |
| * | Chief Investment Officer and Director | September 8, 2014 |
| Ivelin M. Dimitrov | | |
| * | Director | September 8, 2014 |
| Brian S. Dunn | | |
| * | Director | September 8, 2014 |
| Richard P. Dutkiewicz | | |
| * | Director | September 8, 2014 |
| Byron J. Haney | | |
| * | Director | September 8, 2014 |
| Douglas F. Ray | | |

* Signed by Bernard D. Berman pursuant to power of attorney granted on December 10, 2013.

FIFTH STREET FINANCE CORP.

Common Stock (\$0.01 par value per share)

AMENDMENT NO. 1 TO AT-THE-MARKET EQUITY OFFERING SALES AGREEMENT

Septmenber 5, 2014

KEYBANC CAPITAL MARKETS INC. Equity Capital Markets 127 Public Square 4th Floor Cleveland, OH 44114

Ladies and Gentlemen:

Reference is made to the At-the-Market Equity Offering Sales Agreement, dated August 22, 2014 (the "<u>Agreement</u>"), between Fifth Street Finance Corp., a Delaware corporation (the "<u>Company</u>"), Fifth Street Management LLC, FSC CT, Inc. and KeyBanc Capital Markets Inc. ("KeyBanc" or the "<u>Agent</u>"). Pursuant to the Agreement, the Company has agreed to issue and sell from time to time to or through the Agent, having an aggregate offering price of up to \$100.0 million (the "<u>Shares</u>") of the Company's common stock, \$0.01 par value per share (the "<u>Common Stock</u>"), on the terms set forth in Section 2 of the Agreement. All capitalized terms used in this Amendment No. 1 to the Agreement among the Agent and the Company, Fifth Street Management LLC and FSC CT, Inc. (this "<u>Amendment</u>") and not otherwise defined shall have the respective meanings assigned to them in the Agreement. The parties to the Agreement hereby agree as follows:

A. Amendment to Agreement.

1. The Section 2(i) of the Agreement is amended and restated to read as follows:

(i) Notwithstanding any other provision of this Agreement, the Company and the Agent agree that no sales of Shares shall take place, and the Company shall not request the sale of any Shares that would be sold, and the Agent shall not be obligated to sell Shares (a) during any other period in which the Company is, or could be deemed to be, in possession of material non-public information and (b) during the period commencing on (i) with respect to the Company's quarterly filings on Form 10-Q, the 30th day following the end of each fiscal quarter or (ii) with respect to the Company's annual report filings on Form 10-R, the 50th day following the end of the Company's fiscal year, and ending on the date on which the Company files with the Commission a prospectus supplement under Rule 497 under the 1933 Act relating to the Shares that includes updated financial information as of the end of the Company's most recent quarterly period or fiscal year, as applicable (the "Quarterly 497 Filing").

B. No Other Amendments. Except as set forth in Part A above, all the terms and provisions of the Agreement shall continue in full force and effect.

C. <u>Counterparts</u>. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Amendment by one party to the other may be made by facsimile or email transmission.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Agent and the Company in accordance with its terms.

[Signatures appear on the following page]

Very truly yours,

FIFTH STREET FINANCE CORP.

By: /s/ Bernard Berman

Name: Title:

FIFTH STREET MANAGEMENT LLC

By: /s/ Bernard Berman Name:

Title:

FSC CT, INC.

By: /s/ Bernard Berman

Name: Title:

Accepted as of the date hereof:

KEYBANC CAPITAL MARKETS INC.

By: <u>/s/ Christopher G. Malik</u> Name: Christopher G. Malik Title: Director, ECM

[Signature page to the Sales Agreement]