

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

FORM 12b-25

NOTIFICATION OF LATE FILING

SEC FILE NUMBER

001-33901

CUSIP NUMBER

31678A103

(Check one): Form 10-K Form 20-F Form 11-K Form 10-Q Form 10-D Form N-SAR
 Form N-CSR

For Period Ended: September 30, 2015

- Transition Report on Form 10-K
- Transition Report on Form 20-F
- Transition Report on Form 11-K
- Transition Report on Form 10-Q
- Transition Report on Form N-SAR

For the Transition Period Ended: _____

Read Instruction Before Preparing Form. Please Print or Type.

Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates:

PART I — REGISTRANT INFORMATION

Fifth Street Finance Corp.

Full Name of Registrant

None

Former Name if Applicable

777 West Putnam Avenue, 3rd Floor

Address of Principal Executive Office (*Street and Number*)

Greenwich, CT 06830

City, State and Zip Code

PART II — RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate.)

- (a) The reason described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense
 - (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
 - (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.
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PART III — NARRATIVE

State below in reasonable detail why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

Fifth Street Finance Corp. (the "Company") was unable to file its Annual Report on Form 10-K for the period ended September 30, 2015 (the "Form 10-K") by the prescribed filing deadline of 5:30 pm EST on November 30, 2015 without unreasonable effort and expense. The delay in filing the Form 10-K resulted from delays in compiling certain necessary information to complete the closing procedures for the Form 10-K and to prepare a complete filing of the Form 10-K prior to the 5:30 pm EST filing deadline.

Specifically, the Company performed additional procedures in connection with the fiscal year ended September 30, 2015 in light of (1) the previously disclosed putative securities class-action lawsuits against the Company alleging that the Company and certain other defendants engaged in a fraudulent scheme and course of conduct to artificially inflate the Company's assets and investment income and (2) a material weakness in internal control over financial reporting related to not having the appropriate design or not properly maintaining effective controls to internally communicate current accounting policies and procedures including the nature of supporting documentation required to validate certain portfolio company data. Completion of these procedures did not allow the Company to conclude its closing process of its financial results in order to file the Form 10-K prior to the prescribed filing deadline. As previously reported, the Company and Fifth Street Asset Management Inc., the indirect parent company of the Company's investment adviser, intend to vigorously defend against the plaintiffs' allegations.

The Company completed its additional closing procedures and filed the Form 10-K after the prescribed filing deadline of 5:30 pm EST on November 30, 2015. The Form 10-K received an official filing date of December 1, 2015.

PART IV — OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification

Todd G. Owens
(Name)

(203)
(Area Code)

681-3600
(Telephone Number)

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s).

Yes No

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof?

Yes No

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

Forward-Looking Statements

This Form 12b-25 contains forward-looking statements, which are made pursuant to the safe harbor provisions of the Securities Litigation Reform Act of 1995, that involve risks and uncertainties, including statements related to the class-action lawsuits filed against the Company. These forward-looking statements are based upon the Company's current expectations. Such forward-looking statements involve a number of risks and uncertainties that could cause actual results to differ materially from those anticipated by these forward-looking statements. In addition, any forward-looking statement speaks only as of the date on which it is made, and the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as required by law.

Fifth Street Finance Corp.
(Name of Registrant as Specified in Charter)

Fifth Street Finance Corp. has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 1, 2015

By: /s/ Todd G. Owens
Todd G. Owens
Chief Executive Officer
